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1954 Market Trends and Facts

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Contents of This Section

Chemical and Related Markets

Agricultural Chemicals 40
Coal Chemicals 3
Drugs, Fine Chemicals 3
Essential Oils, Aromatics 48
Heavy Chemicals 3
Industrial Organic Chemicals 45
Oils, Fats and Waxes 54
Petroleum Derivatives 39
Protective Coating Materials 3
Textile and Leather Chemicals 50
Chemicals, Oils and Drugs, Price Changes: 1953 9
Chemicals, Oils and Drugs Price Records: 1939-53 7
Washington Activities 5

Advertisers Index

Alan Wood Stee. Co. 47
Allied Asphalt & Mineral Corp. 54
American Flange & Mfg. Co., Inc. 23
Arapahoe Chemicals, Inc. 43
Arapahoe Special Products, Inc. 45
Archer-Daniels-Midland Co. 55
Arista Oil Products Co. 44
Austin Company, The 21

Barium & Chemicals, Inc. 19
Becco Chemical Division 33

Chemo Puro Manufacturing Corp. 44
Cleveland Steel Barrel Co. 47
Columbia Southern Chemical Corp. 15
Crossett Chemical Co. 46
Croton Chemical Corp. 38

Davison Chemical Co. 13
Dickerson Company 40

Emery Industries, Inc. 55
Enjay Company, Inc. 26

Fallek Products Co., Inc. 54
Fine Organics, Inc. 46
Finetex, Inc. 51
First Machinery Corp. 50
Florasynth Laboratories, Inc. 48

Givaudan-Delawanna, Inc. 48

Harshaw Chemical Co., The 18
Hoffmann-La Roche, Inc. 1

Industrial Raw Materials Corp. 32

Jefferson Chemical Co. 16

Kolker Chemical Corp. 38

Lindsay Chemical Co. 43

Magnus, Mabee & Reynard, Inc. 28, 29
Mantrose Corporation 53
Mathieson Chemicals, Olin Mathieson Chemical Corp. 24
Maywood Chemical Works 41, 49
McKesson & Robbins, Inc. 41
Merck & Co., Inc. 8
Metal & Thermit Corporation 36

National Tung Oil Marketing Cooperative, Inc. 52
Neville Chemical Company 12
Newman Tallow & Soap Machinery Co. 50
Nylos Trading Co., Inc. 17

Olin Mathieson Chemical Corp. Industrial Chemicals Division 24

Parsons-Plymouth, Inc., M. W. 53
Penick, S. B., & Co. 6
Petroleum Specialties, Inc. 25
Petrolite Corp., Ltd., Wax Division 37
Philipp Brothers Chemicals, Inc. 11
Polak's Frutal Works 49

Reichhold Chemicals, Inc. 27
Rosenthal Bercow Co., Inc. 44
Roussel Corporation 42

Samuel, Frank & Co., Inc. 42
Sharples Chemicals, Inc. 10
Sinclair Chemicals, Inc. 2
Standard Brands, Inc. 56
Sumner Chemical Co., Inc. 31
Syntomatic Corp. 50

U. S. Testing Co., Inc. 4

Velsicol Corp. 52
Versenes, Inc. 20

Warwick Wax Company, Inc 34, 35
Wirz, A. H., Inc. 39
Witco Chemical Company 14

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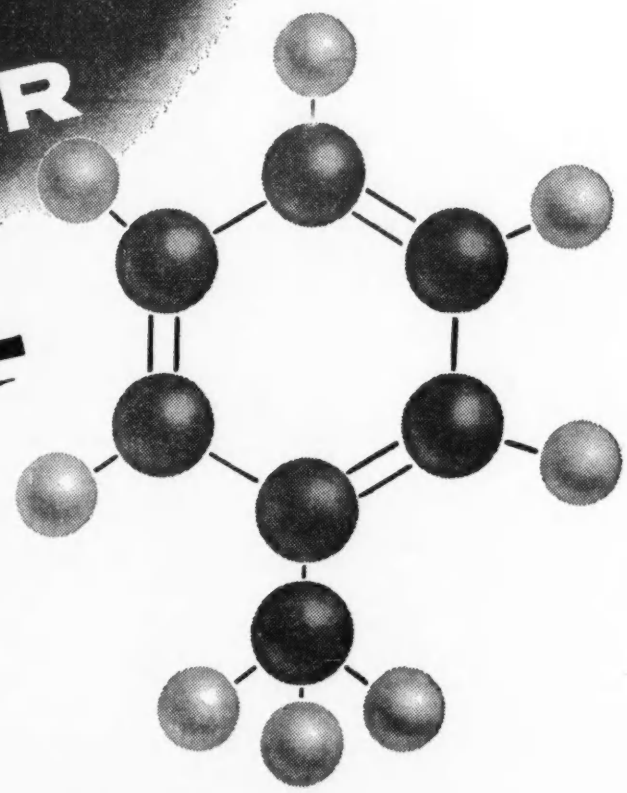

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Chemical and Related Markets in 1954

Coal Chemicals

The year 1954 was, on the whole, not a bad sales year for coal chemicals. Steel operations were somewhat reduced during the past year to a level of about 88,000,000 tons, compared with record production in 1953 of 111,500,000 tons of ingots and castings. Annual capacity was boosted 1,497,000 tons to a record level of 125,828,310 tons at the start of 1955. Substantial stock reduction during the slow period from April to August, 1954, left room for a good finish. Producer estimates indicated prospects for a 95,000,000 to a 111,600,000-ton-year in 1955.

Coal chemicals showed their usual price stability during 1954. Whereas domestic crude naphthalene started the year 1¾ cents under quotations that had been carried through most of the previous year, it finally firmed up in the last quarter so that prices at the start of 1955 were only one-half cent below 1952-1953 levels. Another basic item, benzol, fared less well. Weakness in the fourth quarter finally led to an announcement of a 4-cent reduction for the aromatic.

Toluol Prices Firm All Year

Toluol prices managed to hold through the entire year. The amount of material going to nitration outlets was greatly reduced, but was enough to hold the price structure up. Surplus toluol was noted in the final three months. In general, business was considerably better by the last month and a half, rounding out a relatively good sales year. A step-by-step picture indicates business was slow to pick up momentum, but held to a modest pace for the first three-quarters, with seasonal fluctuations accounting for trends up and down. Then, overall business gained impetus and developed a tinge of optimism in the last quarter.

Activity during the first quarter did not start with a surge. There were some slight increases in buying interest for basic products and intermediates in various markets but the change were mostly gradual and did not disturb the balances of these markets. In many cases the added interest after the first of the year was a result of consumer inventory reduction before the end of the previous year. The consumers themselves were not experiencing a tremendous wave of activity, but they did need material to keep their production schedules going. Another reason some products enjoyed slightly more call at the beginning of the year than they did in previous months was that there had been some price reductions to give sales added impetus. A number of the price changes had been instituted just at year-end and a few were made in the early weeks of January.

Phthalic, Crude Naphthalene Decline

Phthalic anhydride went down and was soon followed by domestic crude naphthalene. The phthalic drop allowed the naphthalene cut to a competitive vantage point over imported crude naphthalene, but it also induced better buying from alkyd resins and phthalate plasticizers when their active season started. The phthalic reduction also put the intermediate in a better competitive position in the polyester resins market. Polyesters still do not amount to a huge outlet, but represent a good potential for the future. Maleic anhydride and styrene also move in comparable quantities to phthalic in this direction.

Lowering of domestic crude naphthalene prices to a level of 5 cents per pound for 78-degree material had the effect of limiting sales of imported hot-pressed crudes to coastal areas and those consuming outlets which did not require long overland freight hauls. Contrary to what might have been expected, soon after domestic naphthalene came down in price, imported material started to creep up fractionally. This paradox was the result of both an improved financial position in European consuming and producing areas, with less need for dollars, and changes in production and supply versus consumption. Steel rates in Europe, particularly in west Germany, underwent the same cuts in output as did domestic production in 1954.

At the same time, a good market for

—Continued on page 47

Drugs, Fine Chemicals, Botanicals

Despite a slow start, sales-wise, business volume last year was about on a par with 1953 in the drugs, fine chemicals and botanicals field. Last year was the first since 1950 in which the armed forces were not actively engaged. As a result, there was a falling-off in government contract requirements, with an increase in competition for the non-military market.

According to trade estimates, wholesale drug sales in the first nine months of 1954 were slightly below those a year earlier. Nevertheless, a sizable spurt in sales during the fourth quarter was expected to bring total sales for the year to a level comparable with the preceding year. Ethical drug dollar volume was, on the whole, lower in 1954 than the year before due to reduced antibiotic and hormone prices. Competition this coming year was expected to be at least as intensive as that during 1954 and there were indications that hormone prices might weaken further.

Antibiotics Market Stable

The overall antibiotics market was relatively stable in 1954. Prices eased slightly early in the year but then held unchanged for the balance. In the bulk drugs field, antibiotics have become the most important in terms of dollar volume. Penicillin and streptomycin continued to be the two most prominent in terms of production volume. However, the industry is feverishly pushing research for more specific types of antibiotics for use as selective cures in many viral diseases for which there is no definite cure, such as grippes, influenza, measles, mumps, smallpox, encephalitis and poliomylitis.

The use of antibiotics has been so effective that tuberculosis and pneumonia, formerly the greatest killers among the population, have been displaced by heart disease and cancer. The use of broad-spectrum antibiotics has increased tremendously in the past year. These drugs are capable of attacking a wider variety of ailments than streptomycin and penicillin, although they are considerably higher in price, a factor which has had a limiting effect upon consumer usage. Increased production economies, however, were expected to bring prices down this year, although competition will probably prove the strongest incentive toward further lowering in prices.

Penicillin in Animal Nutrition

Perhaps the greatest use for penicillin in the not too distant future may be in animal nutrition. It was understood that almost the entire broiler chicken industry uses penicillin supplemented feed to increase the size and disease resistance of poultry raised. Considerable experimentation in the feeding of other food animals with antibiotic-fortified feeds was reported to be in progress, with varied success.

The use of antibiotics in preventing plant diseases was perhaps the newest application to which these versatile compounds was put in 1954. Although still in an early stage of development, it was noted that treatment of orchard crops in some instances prevented "fire-blight," a particularly destructive plant disease peculiar to fruit trees. Further developments in this field were eagerly anticipated, both by growers and antibiotics manufacturers, since potential use in this application was said to be tremendous.

A number of interesting developments in the drugs field poured out of research laboratories last year. Perhaps in no field is so high a percentage of dollar income channeled into research—and not without reason. Many of the largest manufacturers in the drug industry today earn the bulk of their income from compounds which are the results of research efforts in recent years. That old standby, diethylstilbestrol, once again loomed into prominence last year.

Caponization of Chickens

Several years ago this compound was used for the caponization of chickens in addition to its use as a female hormone in human medicine. The latest development in diethylstilbestrol was also in animal nutrition, a field in which considerable research is in progress, judging by the variety of drug compounds being used to

—Continued on page 41

Heavy Chemicals

The heavy chemical industry at the beginning of 1954 was beset by the troublesome problem of rapidly expanding production facilities in the face of generally slackening industrial activity and lower peacetime demand. Consumer inventories were heavy during most of the first quarter, and most purchasing agents were content to play it close to the vest. As a result, there was no real pressure placed on chemical production and most of the large volume items came into heavy supply.

The mild recession in the chemical industry during the first half of the year, while reflective of declines in many of the major consuming industries, was not as acute as had been expected, nor was it as pronounced as in other heavy industry. Steel production over the year underwent a 21-percent decline, and, while the last half of the year saw a large portion of ground regained, the first half was slow by comparison. Automotive output was slowed considerably during the first half by overproduction, and, as a result, closely-linked rubber, textile, and steel operations were off correspondingly.

Rayon Industry in Doldrums

Rayon mills opened the year at approximately 80 percent of capacity, and that industry was in the doldrums for most of the year. As a result, caustic soda production tended to back up, and the adverse effect was felt throughout the alkali industry. The market for chlorinated pesticides was not up to snuff, bringing consumption of chlorine in that industry down. One bright spot among consuming industries was pulp and paper production, which held to a consistently high rate nearly all year. Good quantities of saltcake, chlorine, caustic soda and other alkalies moved in that direction.

The television industry maintained a high rate of production, and steady high output of picture tubes accounted for large amounts of potassium carbonate. Synthetic detergent output showed tendencies toward expansion of output and facilities, and a variety of chemicals moved steadily in that direction. The market also held up well for the chemicals used in petroleum refining. Sodium silicate, used chiefly as a catalytic agent in that industry, enoyed a high rate of sales all wear. The two areas of the chemical industry consuming the largest dollar volume of chemicals, namely synthetic fibers and plastics, continued to undergo a remarkable growth in capacity which has doubled every five years.

Competition Among Auto Makers

About mid-year, it became apparent to the pessimists that the industry was not due to plunge into a serious recession, and as consuming plants began large output to fill increased consumer needs, chemical industry business picked up correspondingly. Hot and heavy competition in Detroit among automobile manufacturers spurred production in the rubber industry of tubeless tires. As a consequence, there was heavier production of high-tenacity cord by the rayon industry for the tires, as well as increased staple production for upholstery fabrics. Steel output recovered sharply, and by the year's end was hard-pressed to fill backlogged orders.

Chlorine and the alkalies, bellwethers of the heavy chemicals industry, were perhaps most acutely reflective of the trend of 1954 chemical business. Caustic soda producers, in anticipation of a sales drop early in the year, brought stocks into a fairly good balance by cutting back production in mid-January. Chlorine and soda ash output were also adjusted downward, but not sufficiently enough to avoid a long supply position which was to prevail all year.

It was not until the second quarter that inquiry for caustic soda and chlorine began to improve. By May, soda ash demand had also improved, particularly as the glass industry began manufacturing soft drink and beer bottles on large scale for summer demand. Buying interest continued on the rise through June, and producers found it necessary to adust prices

—Continued on page 36

Protective Coatings Materials

The first nine months of 1954 produced a sluggish sales volume for most synthetic resins, lacquer materials and paint pigments. A definite spurt in the last quarter, however, wiped out many of the losses of the previous months. This overall pickup in demand for protective coatings materials brought the year to a close with sales closely approximating records of previous years.

Synthetic resin production lagged during the first three-fourths of the year, but because of last-quarter improvement ended the year only 3 percent below the record production of 1953. Last year's output in the United States was approximately 2,714,000,000 pounds, compared with 2,776,627,000 pounds in 1953, according to Tariff Commission figures.

Nineteen fifty-four was only the second year since 1942 in which sales of synthetic resins failed to top the year preceding. In 1952 sales were down slightly from 1951 but then recovered to an all-time high in 1953. Compared with any other year, 1954 can be counted as a good one.

Jump in Polyethylene Output

Polyethylene production jumped in 1954 to a record high of approximately 220,000,000 pounds from an output of only 130,000,000 pounds in 1953. The most outstanding areas in which polyethylene use increased were in packaging of foods; use in drum liners; manufacture of polyethylene pipe for water supply, and expanding development of polyethylene insulation for wires and cables.

Polystyrene molding materials maintained their poundage leadership last year with production for the first ten months reported at approximately 266,721,000 pounds. Phenolic molding compounds totaled some 148,334,000 pounds. Vinyl production came to 118,375,000 pounds in the period.

Epoxy resins moved to a broad demand throughout the year, with the automobile industry one of the leading consumers. Usage of plastics in automobiles for safety glass and for upholstery showed a sharp increase because of new designs that called for more areas of safety glass with plastic sandwiched between two layers of glass. The average 1955 automobile calls for about thirty-three square feet of safety glass as compared with only about twenty-six square feet in 1954.

Gross Sales Billings Off

Statistics from representative molders, extruders and mold makers using both thermoplastic and thermosetting materials reveal that gross sales billings were off 8.4 percent for the first ten months of the year as compared with the like period in 1953. Thermosetting molders suffered a greater decline during the first ten months than those using thermoplastics, with the former's business down 17.8 percent but the latter's down only 4½ percent. Ex-

—Continued on page 52

Trend of Protective Coatings Material Prices

100=1949 Average

	1954											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	93.86	94.68	93.68	96.52	96.60	96.63	96.61	96.62	97.05	97.06	97.08	97.08
L.	93.65	93.62	93.58	93.59	96.53	96.59	96.60	96.61	96.62	97.05	97.06	97.08

	1953											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	88.44	88.43	88.44	89.77	89.85	90.21	90.21	90.22	90.22	91.49	92.88	93.86
L.	88.44	88.43	88.43	89.60	89.78	89.85	90.21	90.21	90.22	90.21	91.49	92.85

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US Relaxes Hold on Business in 1954

The chemical and allied products industry is continuing to find it necessary to focus a major share of attention on the activities of Washington, both legislative and governmental, and last year was no exception. Although the second year of the Eisenhower administration witnessed a further easing of world tensions and continued withdrawal of Washington from the spotlight of industry affairs, 1954 had its share of important developments, among them the following:—

1. Congress undertook and completed the first major overhaul of the tax structure in seventy-five years, which will go far towards removing many of the inequities and confusing provisions of the old laws.

2. A bitter tug of war was waged between the administration and tariff protectionists in and out of congress over the question of liberalizing the reciprocal trade agreements act, which was still unsettled at the year's end.

3. The trend of industry mergers became of increasing concern to the government, causing the Federal Trade Commission to institute a formal investigation into the situation while the antitrust division of the Department of Justice maintained an aggressive campaign of anti-monopoly activities.

4. After two years in office, the Republicans were voted out of control of congress by the people in the mid-term elections, which raised a big question mark over how much of the Eisenhower program will be enacted into law by the new congress.

Year Started on Sour Note

Nineteen fifty-four started out on a rather sour note. Gloom prevailed in many business quarters over prospects for the year. Production was slipping, sales were down, and unemployment was rising. As the year progressed, however, optimism over the future rose and at the year's end business and industry were moving ahead with apparent confidence.

Government economists believe that 1955 will witness a continuance of the "good times" of the past quarter. They look for a slight lowering of prices, but more jobs and higher profits, and a steady income for the workers. Agriculture may be a soft spot to be watched. Net farm earnings dropped about 6 percent in 1954 and real farm income was at its lowest level in ten years. A further slight decline in 1955 would not be unexpected.

Government machinery is all set to cope with any unexpected sharp break in farm prices in 1955, however. Congress last session voted approval of a new long-range farm program that gave the Secretary of Agriculture more flexible powers to support the prices of farm products so as to bring production more in line with demand. The action was not without a bitter fight, however, and efforts continued right up to the end to force a mandatory 90 percent of parity price support program on the administration.

Cutting Surplus Farm Stocks

During the year, Secretary of Agriculture Benson took a big step towards reversing the trend of mounting government stocks of surplus farm products. Price supports for dairy products were reduced to 75 percent of parity and similar action was taken in the case of cottonseed. Resultant action was a price drop for butter and an increase in consumption. Vigorous efforts were also made to dispose of the heavy stocks of cottonseed oil and millions of pounds were sold abroad at reduced prices.

The secretary also reduced price supports on soybeans to 80 percent of parity, but continued supports on peanuts and naval stores at 90 percent of parity. At the request of the Defense department, a program of encouraging production of castor beans in this country also was continued and the department agreed to purchase the crop at 6 cents a pound, shelled basis.

Tung oil also was in the news during the year. Although the President recommended to congress that this crop no longer be subject to mandatory price supports, his recommendations were ignored by congress and the program of compulsory supports between 60 and 90 percent of parity was again voted. Meanwhile, the threat that imports of tung oil might upset the price support program led Secretary Benson to recommend to the President that a quota of 10,858,000 pounds be established.

Mr. Eisenhower directed the Tariff Commission to investigate the tung oil situation, after the paint industry protested the proposed quota. In November, the Tariff Commission recommended that a quota of 13,400,000 pounds be established, but this was rejected by the President who said that Argentina and Uruguay would reduce their shipments of tung oil to this country in the new crop year. This, in addition to a short domestic crop, it was pointed out, would make import quotas unnecessary.

A number of the year's developments were of direct concern to the chemical industry. Efforts to draft a satisfactory bill for controlling chemical additives in foods proved unsuccessful and will be resumed this year. On the other hand, the Miller bill for controlling the use of chemical pesticides was enacted into law in July and three months later the Food and Drug Administration proposed safety residue limits for twenty-six materials used on fresh fruits and vegetables.

The chemical and rubber division of the Business and Defense Services Administration issued survey reports on production and consumption of sulfuric acid, toluol and sulfur and undertook similar surveys on benzol, penicillin, calcium carbide and acetylene. Plans also were mapped to conduct such surveys this year on about thirty important chemicals. Direction of the chemical division changed hands twice during the year. Harold Smith returned to Dow Chemical Company, Midland, Mich., and was succeeded by Carl Morrison of Enjay Company, New York. He in turn was succeeded at the end of his "term" by Herbert Bertine of General Chemical Division of Allied Chemical & Dye Corporation, New York.

Ammonia Apportionment Ended

During the year, the ammonia apportionment program, which the government instituted when the military stepped up ammonia purchases, came to an end. A controversy over disposing of the army's chlorine plant at Muscle Shoals was settled by sale of the plant to Diamond Alkali Company, Cleveland, Ohio. The government's offer of submerged sulfur lands on the continental shelf for leasing found only one taker—Shell Oil Company of New Orleans, La., which acquired leases on about 25,000 acres off the coast of Louisiana. The question whether the government should issue tax amortization certificates covering storage facilities for ammonia came up at conferences with industry, and was decided in the negative.

The Food and Drug Administration carried on an active program of enforcement in spite of a reduction in appropriations to $5,000,000. After a survey of leading medical authorities, FDA ruled that talcum powders prepared with 5 percent boric acid powder were safe for use. The agency ruled that coumarin should no longer be used as a food ingredient, and also told the drug industry to include a warning in the labeling of drug products containing oil of wintergreen, in amounts of more than 5 percent, against the misuse of the drug. A move, begun early in the year, to remove the certified coaltar colors orange No. 1 and 2 and red No. 32 from the FD&C list went through the public hearing stage and at the end of the year a tentative order was prepared limiting the use of these colors to drugs and cosmetics applied externally.

Crawford Retires as FDA Head

After thirty years service, most of them spent in policy-making positions, Charles W. Crawford retired as Commissioner of Foods and Drugs and was succeeded by George P. Larrick, long-time veteran in the agency. Mr. Crawford's retirement and Mr. Larrick's elevation came simultaneously with the appointment of Bradshaw Mintener, of Pillsbury Mills, Inc., Minneapolis, Minn., as assistant Secretary of the Department of Health, Education and Welfare, to supervise policy actions of the FDA.

Meanwhile, drug manufacturers continued to protest the certification of antibiotics and, after conferences with FDA earlier in the year, appointed an evaluation committee to go over the certification records of the FDA. The industry also worked on a problem relating to exports stemming from the delay which sometime is encountered in getting new drug applications approved. Because a new drug cannot be exported until its application has been approved, the industry complained that it often found that foreign producers had captured the market before they could begin exporting.

Two important matters of concern to the fertilizer industry during the year were the moves to consolidate the two trade associations into a single industry group, and raising of the goal for ammonia production. Also during the year were these other developments:—Industry efforts to get part of the business of supplying fertilizer to Korea was made easier when congress passed a bill requiring 50 percent of the commodities purchased with foreign aid funds to be carried in American bottoms; USDA entered into several barter contracts involving fertilizer and surplus farm crops; the Treasury found evidence of possible dumping of potash into the country from East Germany.

Merger of Fertilizer Associations

The merger of the two trade associations —National Fertilizer Association and the American Plant Food Council—into a single organization to be known as the National Plant Food Institute was virtually completed at the end of the year. Both associations in special meetings of members approved the merger and steps were under way to make it official by July 1. The merger climaxes several years effort to repair the rift that had developed in the industry ten years ago. At that time a group of fertilizer producers became dissatisfied with the efforts of the NFA to combat the movement to put the government in the fertilizer business and broke away to form a separate group.

The Federal Trade Commission issued several important rulings during the year. One was the first ruling under the new anti-merger law and took a more liberal view of the intent of the law. Under the ruling, the commission rejected the so-called "substantial doctrine" rule under which it was necessary to show only that mergers "may" substantially lessen competition to be unlawful. The new rule makes it necessary to consider all relevant factors in determining the probable economic results of company consolidations.

The more liberal view on corporate mergers was followed up later in the year, however, with an investigation of the merger trend in industry. The investigation was still underway at the close of the year, but chairman Edward F. Howrey promised a report in a few months. The investigation is to provide documented facts for the Department of Justice and congress. The Department of Justice, meanwhile, kept up an aggressive campaign against antitrust law violations by instituting thirty-five new cases during the year while bringing fifty-four others to a close.

ntration of Chemical Output

Other activities of the FTC included issuance of a report on changes in concentration of manufacturing in the chemical industry between 1935 and 1947; revamping of proceedings to provide defendants in cases before the commission with more clear-cut interpretations of the antitrust laws; issuance of a policy statement jointly with the FDA clarifying the jurisdictions of the two agencies over labeling and advertising, and adoption of a program of compliance checking to make certain that the orders of the commission are carried out.

Refusal of congress to approve the President's legislation on health reinsurance was one of the few setbacks suffered by Mr. Eisenhower during the year. After weeks of consideration and hearings by the house interstate commerce committee, the bill was recommitted on the house floor. Mr. Eisenhower promptly announced that he would submit the program again this year. Although defeat of the President on the health reinsurance question gained the headlines, there were a number of other important happenings in the health field such as:—

Gamma Globulin Survey

Report of a survey which showed that gamma globulin did not have the beneficial effects of preventing or alleviating poliomyelitis as was first thought; the National Research Council's evaluation study of the current regulations of the FDA over dietary foods as regards inclusion of vitamins, which found no pressing need for changing current enforcement policy; President Eisenhower's veto of the drug codification bill, H. R. 9728, after discovery of two sleepers that would sharply curb FDA powers of enforcement; appointment of a task force to survey government services in the health field by the Hoover commission, and the start-up of conferences by drug industry representatives with government officials, with the view of supporting moves to permit patenting of drug processes in Italy and of countering moves in France to tax royalties paid for the use of American patented processes.

Rising imports and reduced prices in lead and zinc during the year were matters that demanded much attention of congress and the White House. With the mining states demanding relief from imports, the Tariff Commission investigated the situation and concluded that import restrictions would violate US international commitments. As a consequence, bills to impose import quotas were quickly pigeonholed by the congressional committees.

Metals Stockpiling Expanded

President Eisenhower ordered an expansion of the metals stockpile program affecting some thirty-five or forty minerals in consideration of the fact that in the event of war it is possible that major parts of an entire industry might be wiped out. Also the Defense Materials System of the Business and Defense Services Administration was revised and refined to make it possible to put the control system into immediate operation with the least burden to industry in the event of a war emergency.

Administration plans to close down the Texas City, Tex., tin smelter were abandoned in the face of strong congressional pressure until a thorough study can be made of the tin supply in relation to defense. Titanium supplies continued to be a big headache for the government and several contracts were entered into during the year to expand production. A mercury buying program was announced by General Services Administration to encourage domestic production and lower prices of the metal. A shortage of copper resulting from prolonged strikes made it necessary for the government to release some of its inventories so that vital industries could continue operations.

Fight Over Trade Pacts Law

The controversy that raged during the year over the matter of liberalizing the trade agreements law got off to an early start with the filing of the Randall commission report in January recommending that the act be extended for three years; that the President be empowered to reduce traffs an additional 5 percent a year during this period; that he reduce all tariffs to a maximum of 50 percent, and that he halve the tariff on products imported into the United States for which there was no competitive American tariff.

The report was promptly attacked by the high protectionist groups and strong minority views were filed by Republican chairmen Daniel Reed and Eugene Millikin of the house ways and means committee and the senate finance committee. The upshot was that the President abandoned efforts to get the program enacted and accepted a bill to extend the law for another year unchanged. Congress did, however, give its approval to a second customs simplification bill designed to remove more of the administrative red tape facing importers.

While the battle over the trade agreements legislation went on, the Tariff Commission was busily engaged in a number of other directions. Probes of imports were undertaken during the year with respect to glue, fluorspar, lead and zinc and about sixteen chemical products whose duties exceeded 50 percent on an ad valorem basis. Also the State department conducted hearings, in preparation for talks at Geneva, on modifying the general terms of the General Agreement on Tariffs and Trade, including extension of the "freeze" on tariff changes due to expire July 1, 1955.

Trade Agreement With Japan

Announcement was made of intentions to negotiate a trade agreement with Japan which will involve the possible lowering of tariffs on hundreds of coaltar products, not necessarily the products of the Japanese chemical industry but produced by the industries of France, Britain and Germany. Of major importance also was the extensive revision of the export control program so as to allow more freedom in trade between the western nations and the Soviet bloc.

Other happenings during the year included the following:—

The government-owned rubber producing facilities were put up for sale during the year and contracts were concluded before the December 27 deadline for disposing of all of the plants except three. . . . The synthetic liquid fuels act was allowed to expire in April by Secretary of the Interior McKay and activities of the department were limited to fundamental laboratory and pilot-plant research. . . . Over the objections of the Federal Power Commission, the Supreme Court of the United States ruled that the commission has the authority to regulate prices charged by independent gas producers and gatherers for gas sold to interstate carriers.

The Office of Defense Mobilization al-

—Continued on page 55

the trident

The Athenian sea-god, Poseiden bore the three pronged trident;
with this all-powerful weapon he guarded the vast waters
against all foes. Throughout history, legend and lore
the trident has remained the symbol of potency and authority.

AN ANTIMICROBIAL TRIDENT

. . . effective antibiotic power is seen in the Penick Trident:

BACITRACIN Penitracin (Penick Brand Bacitracin), perfected after over six years of research has been standardized to meet exacting specifications for potency, mesh, density and solution color. Significantly non-allergenic. Penitracin is adaptable for parental use in dry powder vials; for topical use in tablet, troche, ointment, or suppository.

NEOMYCIN Neomycin, the newest of the streptomyces antibiotics, displays the widest antimicrobial spectrum of the group. Neomycin Sulfate Penick, a water soluble powder, contains at least 60% Neomycin base and easily meets all recognized standards. It is adaptable for use in solutions, troches, ointments and tablets.

TYROTHRICIN Tyrothricin Penick is a highly purified product well within U.S.P. specifications. Tyrothricin was the first commercially available antibiotic. The Penick brand is adapted to broad topical usage.

The positive, individual antibacterial effects of these three antibiotics are further enhanced by combination with each other through their synergistic interaction. Alone or combined. Penitracin, Neomycin and Tyrothricin present versatile means of attack against susceptible bacteria over a wide range.

As primary producers of these and other specialty antibiotics, we supply these products in bulk form only for pharmaceutical manufacture.

Penick antibiotics are produced with infinite care and under exacting control conditions; they benefit from every facility our extensive experience affords. Let us help you interpret the current regulations covering these antibiotics. We shall be happy to furnish information and prices.

BASIC PRODUCTS FOR THE PHARMACEUTICAL INDUSTRY

S. B. PENICK & COMPANY

50 Church Street, New York 8, N.Y. Telephone COrtlandt 7-1970

735 West Division Street, Chicago 10, Ill. Telephone MOhawk 4-5651

Chemicals, Oils and Drugs Price Record

Heavy Industrial Chemicals

	1939 H.	1939 L.	1942 H.	1942 L.	1947 H.	1947 L.	1953 H.	1953 L.	1954 H.	1954 L.
Acid, acetic, glac., 99.5%	$5.50	$5.00	$6.93	$6.25	$8.12	$7.62	$9.00	$9.00	$10.00	$9.00
Chromic, 99%	.15½	.15¼	.16¼	.16¼	.21¾	.20	.27½	.27	.27½	.27½
Formic, 90%	.10½	.10½	.10½	.10½	.13	.12½	.16¼	.14¾	.16¼	.16¼
Hydrochloric, 18°	1.15	1.15	1.15	1.15	1.70	1.50	2.50	2.45	2.50	2.50
Nitric, 36°	5.00	5.00	5.00	5.00	5.00	5.00	5.25	5.00	5.75	5.25
Oxalic	.10¾	.10¾	.11¼	.11¼	.13½	.13	.16½	.15¾	.16½	.16½
Sulfuric, 66°	16.50	16.50	16.50	16.50	16.50	15.00	22.35	19.61	22.35	22.35
Tannic, tech	.40	.40	.71	.71	.69	.69	.95	.95	.95	.95
Alum, ammonium, gran.	3.50	3.15	4.00	4.00	4.00	4.00	4.30	3.80	4.30	4.30
Aluminum sulfate, coml.	1.15	1.15	1.15	1.15	1.30	1.15	1.85	1.65	1.85	1.85
Ammonia, anhyd., coml.	.04½	.04½	.05	.05	.03075	.03075	.044	.04375	.044	.04375
Arsenic, white	.03	.03	.04	.04	.06	.06	.05½	.05½	.05½	.05½
Barium chloride, tech	77.00	77.00	77.00	77.00	85.00	80.00	158.00	152.00	158.00	158.00
Bleaching powder	2.00	2.00	2.50	2.23	3.75	2.75	5.02	5.02	5.02	5.02
Calcium arsenate	.05½	.06½	.07	.06½	.09½	.09	.10	.09	.10	.09
Chloride, flake	22.00	22.00	18.50	18.50	22.00	18.50	27.00	25.00	27.00	27.00
Chlorine, liquid	2.00	1.75	1.75	1.75	2.25	2.00	2.93	2.70	2.93	2.93
Cobalt oxide, black	1.84	1.67	1.84	1.84	1.27½	1.16	1.96	1.76	1.96	1.96
Copper, carbonate	.169	.14	.19½	.18	.26	.24	.263	.235	.273	.263
Sulfate, 99%	4.75	4.10	5.15	5.15	7.60	7.10	10.35	10.35	10.35	10.35
Ferrous sulfate, tech	16.00	14.00	14.00	14.00	14.00	14.00	34.50	33.50	34.50	34.50
Magnesium sulfate, tech.	1.80	1.80	1.80	1.80	2.30	2.05	2.15	2.15	2.15	2.15
Glauber's salt, dom	.95	.95	1.05	1.05	1.75	1.25	2.35	2.25	2.50	2.35
Lead acetate, wh. brok.	.11	.10	.12½	.12	.18½	.17	.23	.23	.23	.23
Arsenate	.11	.10	.11	.09	.21¾	.20	.27½	.27¼	.27½	.27½
Magnesia, cal., tech	.26	.26	.26	.26	.33	.29	.32	.32	.32	.25¼
Magnesium chloride	32.00	32.00	32.00	32.00	40.00	37.00	51.00	50.00	50.00	50.00
Nickel chloride	.13	.13	.13	.13	.14½	.14	.29	.26¼	.46½	.38½
Phosphorus, red, export	.40	.40	.40	.40	.44	.40	.46	.42	.43	.43
Potash caustic, solid	.06¼	.03¼	.03¼	.06¼	.07¼	.06¾	.087	.079	.087	.087
Potassium carbonate, tech.	.06½	.06½	.06½	.06½	.07½	.07¼	.09	.0825	.09	.09
Chlorate, powd	.10	.08½	.09¾	.09¾	.11½	.09	.10¾	.10¼	.10¾	.10¾
Saltpeter, gran	6.50	6.50	8.20	8.20	8.20	8.20	9.75	9.75	9.75	9.75
Soda ash, 58%, light	1.05	1.05	1.05	1.05	1.30	1.20	1.65	1.50	1.65	1.65
Soda, caustic, solid	2.30	2.30	2.30	2.30	2.85	2.50	3.70	3.35	3.85	3.70
Sodium chlorate, dom	.03¼	.03¼	.03¼	.06½	.07¼	.06¾	.08¾	.08¼	.08¾	.08¾
Phosphate, tribasic	2.25	2.00	2.70	2.70	3.50	2.70	4.45	4.20	4.20	4.20
Silicofluoride	.05¾	.04	.12	.05	.07½	.06¼	.07	.07	.07	.07
Sulfur, crude, mines	16.00	16.00	16.00	16.00	18.00	16.00	26.50	22.00	26.50	26.50
Stannous chloride, anhyd.	.40	.36½	.39	.39	.92	.72	.84½	.71½	.824	.769

Coal Chemicals

	1939 H.	1939 L.	1942 H.	1942 L.	1947 H.	1947 L.	1953 H.	1953 L.	1954 H.	1954 L.
Acid, benzoic, tech	.43	.43	.43	.43	.43	.43	.44	.42½	.44	.44
Cresylic, high-boil	.68	.49	.81	.81	1.42	.90	.90	.90	.90	.90
Tobias	.65	.55	.55	.55	.62	.60	.74	.74	.74	.74
Aniline oil	.15	.15	.15	.15	.13	.11	.20	.18	.20	.20
Benzol	.16	.16	.15	.15	.21½	.17	.40*	.30*	.40	.40
Creosote oil, crude	.13½	.13½	.15½	.15½	.19½	.17	.22	.20	.22	.22
p-Dichlorobenzene	.11	.11	.11	.11	.12½	.11	.16½	.14½	.16½	.16½
Dinitrobenzene	.18	.18	.18	.18	.18	.16	.20	.20	.20	.20
Dinitrophenol	.22	.22	.22	.22	.22	.22	.37	.34	.37	.37
Diphenylguanidine	.35	.35	.35	.35	.35	.35	.48	.44½	.48	.48
Naphthalene, crude, dom., 78°	.0225	.0225	.0275	.0250	.0450	.0350	.0675	.05	.05	.05
a-Naphthylamine	.32	.32	.32	.32	.35	.35	.50	.43	.50	.50
Nitrobenzene	.07	.07	.07	.07	.07½	.07	.11	.09½	.11	.11
Phenol, USP	.14½	.13	.12½	.12½	.11½	.10½	.18	.16	.16	.16
Phthalic anhydride	.14½	.14½	.14½	.14½	.17½	.14½	.21½	.19½	.19½	.19½
Resorcinol, tech	.75	.75	.68	.68	.68	.68	.82½	.77½	.77½	.77½
Tar acid oil, 15%	.22	.21	.27½	.27½	.43	.26½	.39	.39	.39	.39
Toluol, pure	.30	.27	.33	.33	.30	.23	.32*	.30*	.32	.32
Xylidines, mixed	.35	.35	.35	.35	.38	.35	.39	.39	.39	.39
Xylol, com	.27	.26	.27	.27	.30	.25	.32*	.30*	.32	.32

* F.o.b. Pittsburgh district.

Botanical Drugs, Spices, and Gums

	1939 H.	1939 L.	1942 H.	1942 L.	1947 H.	1947 L.	1953 H.	1953 L.	1954 H.	1954 L.
Belladonna leaves	.30	.12½	3.45	1.60	2.75	1.40	.32	.28	.35	.28
Root	.40	.13	2.25	1.30	2.50	1.10	.45	.40	.45	.45
Black haw root bark	.24	.20	.40	.39	.82	.75	.65	.52	.65	.65
Buchu leaves	.80	.30	.80	.74	1.05	.80	.45	.45	.50	.45
Cascara sagrada bark	.14	.10	.23	.20	.44	.40	.34	.29	.36	.30
Chamomile flow., Hung.	.60	.20	.80	.60	.70	.65	.70	.70	.75	.70
Digitalis leaves	.40	.35	.50	.45	1.05	1.05	1.05	.90	.90	.90
Ergot, NF	3.50	1.25	1.70	1.25	1.55	.90	3.75	2.75	3.50	2.75
Ginger, African	.09	.04¼	.45	.28	.15	.11	.15	.12	.33	.15
Goldenseal root	3.60	2.75	4.75	3.95	8.90	6.50	3.00	2.25	2.50	2.25
Gum arabic sorts	.19	.09	.22	.14	.14¼	.13	.15½	.13½	.19	.16¼
Myrrh, USP	.65	.39	.78	.60	.48	.45	.38	.30	.38	.38
Tragacanth, No. 1	2.50	2.25	3.75	3.25	4.85	3.60	2.85	2.85	2.85	2.85
Henbane leaves	.65	.14½	3.25	1.85	1.25	1.00	.40	.35	.35	.35
Jalap root, NF	.24	.15	.65	.45	.45	.42	.38	.38	.38	.38
Lobelia	.12	.11	.50	.33	.82	.60	.75	.45	1.50N	.45
Mandrake root	.11	.09	.25	.18	.40	.33	.32	.29	.32	.30
Papain, powd	2.10	1.10	1.10	.84	6.50	5.75	7.00	4.00	4.50	2.50
Rhubarb root	.55	.35	1.20	.75	1.40	.60	.85	.75	.75	.75
Sarsaparilla root, Mex.	.19	.13	.22	.19	.60	.45	.35	.17	.40	.40
Senega root	.85	.65	.95	.59	2.65	1.75	2.30	1.90	3.25	2.30
Senna leaves, Tinn., No. 1	.14	.09	.16	.14	.25	.17	.19	.17	.19	.19
Soapbark, whole	.23	.07	.13	.09	.18	.18	.22	.22	.28	.22
Stramonium leaves	.17	.13	.50	.27	.22	.22	.19	.17	.18	.17
Uva ursi leaves	.11	.08	.25	.20	.16	.12	.12	.12	.12	.12
Valerian root	.27	.09½	1.70	1.15	.58	.45	.38	.36	.38	.38
Vanilla beans, Mexican	6.50	5.00	16.00	11.00	10.50	8.25	7.50	4.50	10.50	7.50
Wild cherry bark	.07	.04½	.09½	.07	.24	.18	.19	.18	.20	.18

Essential Oils and Aromatic Chemicals

	1939 H.	1939 L.	1942 H.	1942 L.	1947 H.	1947 L.	1953 H.	1953 L.	1954 H.	1954 L.
Alcohol, benzyl	.63	.63	.63	.63	.65	.65	.64	.64	.64	.64
Citronellol	1.60	1.60	1.60	1.75	5.70	3.85	1.90	1.70	3.25	1.90
Coumarin	2.75	2.75	2.75	2.75	2.90	2.75	2.94	2.94	3.10	2.94
Oil, anise, USP	.85	.63	3.50	2.10	1.25	.65	2.75	1.75	3.50	2.75
Cinnamon, USP	1.20	.88	11.00	10.00	3.50	2.25	6.75	5.50		NP
Citronella, Ceylon	.46	.34	1.70	1.05	2.25	.75	.60	.48	1.35	.60
Clove, USP	1.55	.95	1.75	1.40	1.50	1.30	9.50	5.25	5.25	3.25
Eucalyptus, USP, 70-80%	.59	.33	.96	.70	1.18	1.05	.75	.60	.67	.60
Geranium, Bourbon	3.25	2.40	25.00	17.00	16.50	10.50	10.85	9.75	11.25	10.25
Lavender, spike	1.15	.95	4.15	2.75	2.05	1.50	1.65	1.30	1.85	1.50
Lemon, Calif.	3.00	2.00	3.25	3.25	3.50	3.10	7.10	5.75	6.50	4.60
Lemongrass	.85	.32	3.75	1.30	3.80	1.25	1.30	.90	2.70	1.15
Lime, dist	4.15	3.00	13.00	3.25	6.00	4.00	6.50	5.25	7.25	3.25
Orange, exp., Calif	1.50	.75	3.25	2.25	1.70	1.60	.90	.65	.90	.60
Peppermint, nat	2.75	2.05	7.00	5.30	8.50	7.60	5.75	4.50	8.00	5.25
Sandalwood, USP	5.50	4.50	6.00	5.85	16.50	11.15	9.25	10.25	11.50	9.50
Sassafras, artif	.75	.34	2.00	2.00	.90	.65	.48	.42	1.00	.48
Spearmint, USP	2.00	1.70	3.25	3.00	13.50	6.75	8.25	5.70	6.00	3.85
Wormwood	3.25	2.00	3.00	2.75	5.60	3.85	5.50	5.65	5.50	5.00
Terpineol, prime	.25	.23	.40	.33	.47	.42	.36	.30	.30	.30
Vanillin, ex guaicol	2.50	2.10	2.35	2.35	3.15	3.00	3.00	3.00	3.00	3.00

Fertilizer Materials

	1939 H.	1939 L.	1942 H.	1942 L.	1947 H.	1947 L.	1953 H.	1953 L.	1954 H.	1954 L.
Ammonium sulfate, dom.	28.00	28.00	28.20	23.00	38.00	28.20	49.50	44.00	44.00	42.00
Phosphate rock, Fla., 70-68%	1.90	1.90	2.20	2.20	3.49	2.60	4.88	4.40	5.00	4.88
Potash manure salt, dom,	.58½	.58½	.60	.60	.20*	.20*	.21*	.21*	.21	.17
Muriate, 60%	.53½	.53½	.53½	.53½	.53½*	.37½*	.43*	.43*	.39½	.36
Sodium nitrate, crude, dom.	27.00	27.00	27.00	27.00	40.50	35.00	51.00	47.00	47.00	47.00
Superphosphate, pile	8.50	7.50	10.24	9.60	13.68	12.60	18.20	17.20	18.20	18.20
Urea, dom., 46%	95.00	95.00	85.00	80.00	73.00	68.00	120.00	110.00	120.00	110.00

* F.o.b. N. M. mines.

Paint, Varnish and Lacquer Materials

	1939 H.	1939 L.	1942 H.	1942 L.	1947 H.	1947 L.	1953 H.	1953 L.	1954 H.	1954 L.
Acetone, CP	.06	.04½	.10	.08½	.08	.07	.08½	.08½	.08½	.07½
Alcohol, n-butyl	.09	.07	.15¼	.13½	.35	.25	.13	.13	.13	.13
Denatured, SD1	.22½	.19½	.53	.53	.98½	.82½	.45½	.43	.45½	.42½
Amyl acetate, ex fusel	.12½	.09½	.14½	.14½	.27	.24	.17	.15	.15	.15
Barytes, Southern, off-color	31.50	31.50	27.65	27.65	33.00	31.10	37.60	25.00	25.00	25.00
Black, carbon, standard	.0575	.0375	.03625	.03625	.075	.074	.12	.10	.12	.12
Blue, Prussian	.33	.33	.36	.36	.42	.42	.48	.39½	.48	.48
Brown, sienna, Amer., burnt	.03¼	.03	.03¾	.03½	.08	.05	.04½	.04¼	.04½	.04½
Calcium carbonate, air-floated, 325 mesh	12.00	12.00	18.00	18.00	10.50	10.00	7.50	7.50	7.50	7.50
Casein, domestic	.20	.07	.31	.14	.34	.24½	.28	.19¾	.28	.27
Cellulose, acetate, flake	.36	.35	.30	.30	.36	.36	.43	.41	.43	.35
Ethyl acetate, 85%	.06½	.051	.12	.12	.19	.18	.11	.11	.11	.11
Green, chrome, to 5%	.21	.21	.23¼	.23	.32	.29	.38	.35	.38	.38
Gum, copal, Congo	.49½	.34¾	.49½	.49½	.28	.25	.21	.19	.21	.19
Dammar, Bat., A E	.13¾	.11⅞	.25¾	.25¾	.35	.29	.27	.23	.27	.27
Ester	.05½	.06	.09½	.08½	.16¾	.13	.16	.14	.16	.15½
Lead, red, 95%, dry	.0810	.0735	.09¼	.086	.176	.15¾	.1625	.16	.17½	.16
White, basic, carb	.07	.07	.08½	.07¾	.16	.14	.1625	.16	.17½	.16
Litharge, com'l	.0710	.0635	.03¾	.070	.1660	.74	.15½	.15¼	.16½	.14
Lithopone, ordinary	.04⅛	.0375	.04¼	.04¼	.06	.05	.07½	.07½	.07½	.07½
Nitrocellulose, a s	.28	.28	.28	.28	.32	.26	.45	.43	.41	.41
Red, Indian, pure	.08¾	.08¾	.09¼	.09¼	.10¼	.09	.12¾	.12½	.12¾	.12¾
Rosin, gum, K. tanks	6.60	5.35	4.14	3.27	9.65	6.73	7.81	7.20	8.06	7.05
Shellac, TN	.19	.19½	.34	.31	.68	.60	.38	.33	.55	.31
Titanium dioxide, reg	.14	.13	.14½	.14½	.17½	.15½	.22½	.21	.22½	.22½
Turpentine, gum	.34½	.28½	.82½	.69	1.25	.52	.59	.56	.56	.496
Yellow, chrome, CP	.14½	.13½	.16½	.16	.27	.24	.37	.31	.31	.31
Zinc oxide, lead-free	.06¼	.06¼	.07¼	.07¼	.10	.09	.14¼	.13½	.13½	.13¼
Searate, tech	.23	.20	.31	.30	.51	.48	.36	.36	.37	.37

Drugs and Fine Chemicals

	1939 H.	1939 L.	1942 H.	1942 L.	1947 H.	1947 L.	1953 H.	1953 L.	1954 H.	1954 L.
Acetanilide, USP	.30	.30	.34	.30	.40	.40	.80	.61	.80	.80
Acid, acetylsalicylic, USP	.50	.40	.40	.40	.45	.45	.55	.55	.58	.55
Boric, gran., tech	96.00	96.00	99.50	95.50	99.00	99.00	94.25	91.75	94.25	94.25
Citric, gran	.22	.20	.20	.20	.25	.20	.27	.24½	.27	.27
Phosphoric, NF, 85%	.12	.12	.10½	.10½	.10½	.10½	.08½	.08	.08½	.08½
Tartaric, USP	.31¼	.27¼	.70½	.70½	.54½	.45½	.37	.37	.41	.37
Agar, No. 1	1.50	.90	4.75	3.50	3.85	2.75	2.50	2.25	4.00	2.90
Atropine sulfate	4.00	2.50	21.00	18.75	8.90	7.35	4.50	4.00	4.00	4.00
Bismuth subnitrate	1.48	1.33	1.20	1.20	2.15	2.00	2.65	2.65	2.65	2.65
Bromine, purif	.30	.30	.25	.25	.21	.21	.27	.25	.31	.27
Caffeine, natural	2.20	2.20	2.50	2.60	4.25	3.75	3.30	2.80	3.15	2.65
Synthetic	No prices		No prices		No prices		3.30	2.80	3.15	2.65
Camphor, nat., tabs	.82	.53½	1.60	1.60	No stocks		.63	.63	.75	.63
Synth., tabs	.68	.68	.82	.79½	.94	.83	.90	.90	.90	.85
Chloroform, tech	.20	.20	.20	.20	.20	.20	.17	.17	.17	.17
Cream tartar	.23¼	.22¼	.57½	.57½	.57½	.38½	.32	.32	.33	.32
Formaldehyde	.05⅝	.05¾	.05½	.05½	.0370	.0320	.0395	.0395	.0395	.03
Glycerine, USP	.12¼	.12¼	.18	.18	.55	.39¼	.44	.33	.33	.29
Hexamethylenetetramine, tech.	.35	.32	.32	.32	.28	.24	.232	.232	.232	.232
Iodine, resub	2.00	1.75	2.00	2.00	2.85	2.10	2.80	2.55	2.55	2.30
Menthol, natural	3.35	2.90	14.00	13.00	9.20	7.20	6.30	5.00	8.65	5.00
Mercurie chloride	1.99	1.05	2.24	2.24	1.92	1.53	3.68	3.68	4.98	3.68
Methanol, nat., denat	.40	.35	.60	.60	.60	.60	.70	.70	.70	.70
Synthetic	.33	.33	.28	.28	.24	.24	.32	.32	.32	.27
Methyl chloride	.32	.32	.32	.32	.33	.32	.40	.39	.40	.40
Salicylate	.35	.35	.35	.35	.40	.35	.50	.50	.58	.50
Oil, codliver, USP	40.00	20.00	85.00	72.00	85.80	79.20	61.05	61.05	61.05	46.00
Opium, gum, USP	11.50	11.50	13.00	13.00	21.30	1 .30	19.20	19.20	19.20	19.20
Phenolphthalein, USP	.85	.85	.85	.85	.85	.85	1.10	1.10	1.10	1.10
Potassium bromide	.31	.31	.27	.27	.33	.25	.34	.34	.34	.34
Potassium-sodium tartrate, powd.	.20¾	.17⅝	.42½	.42½	.34½	.26	.11	.20½	.13¾	.16½	.11¾
							.32½	.32½	.32½	.33	.32½
Quicksilver, dom	160.00	77.00	212.00	191.00	88.00	77.00	218.00	183.00	330.00	190.00
Quinine sulfate	.64	.61	.80½	.80½	.80½	.80½	.56½	.42	.42	.42
Silver nitrate	.31½	.27	.32⅜	.25⅞	.55¾	.40½	.54¾	.53⅜	.54¾	.54¾
Sodium benzoate, USP	.46	.39	.46	.46	.46	.46	.46	.44½	.44½	.39
Bicarbonate, USP	1.85	1.70	1.85	1.85	2.25	2.25	2.50	2.50	2.70	2.50
Strychnine	.60	.50	.70	.70	1.35	1.25	1.25	1.10	1.10	1.10
Thymol	1.55	1.45	3.00	2.75	3.65	3.40	3.25	3.00	3.00	2.75
Trichloroethylene	.09	.08	.08	.08	.09¾	.08	.11	.11	.11	.11

Oils, Fats, and Waxes

	1939 H.	1939 L.	1942 H.	1942 L.	1947 H.	1947 L.	1953 H.	1953 L.	1954 H.	1954 L.
Acid, stearic, dble pressed	.12½	.10	.1500	.1400	.38	.23	.12¾	.11	.14¼	.11¾
Degras, common	.10	.07	.12½	.08⅝	.12	.10	.17	.11	.11	.10
Oil, castor, No. 3	.11½	.07½	.13	.12⅝	.33¼	.27½	.25¾	.16¾	.16¾	.16⅝
Coconut, crude, Pac. Coast	.05⅝	.02½	.0950	.0835	.26	.11	.20¾	.13¾	.16½	.11⅝
Cod, Newf	.72	.32	.90	.78	.24	.20	.10	.09½	.09¾	.09¼
Corn, crude	.07⅛	.04⅞	.12⅝	.12	.37	.18	.15⅛	.13⅝	.18¼	.16¼
Cottonseed, crude S.E.	.06⅝	.04¼	.12⅝	.12½	.37	.16	.15½	.12⅝	.14⅜	.12⅛
Linseed, raw, N. Y.	.1020	.078	.136	.106	.385	.2910	.1745	.1445	.17¼	.13¼
Menhaden, crude, Balto	.36	.21	.666	.60	.23	.14	.07½	.06	.08¼	.06⅜
Oleo, extra	.12	.08	.19¾	.13¼	No stocks		.19	.10½	.22½	.16½
Palm	.05	.03⅝	.09¼	.09	No stocks		.1270	.11½	.13	.1240
Peanut, crude	.07¼	.05⅜	.13	.13	.37	.19½	.26½	.16¼	.21½	.16¼
Red, single, dist	.08½	.06¼	.1245	.1100	.32¾	.17¾	.12	.10¼	.15	.12
Sardine, crude	.38	.22	.66½	.60	.25	.18	No stocks		.08¾	.08½
Soybean, crude	.0650	.0450	.12½	.11⅜	.34	.15¼	.137⅛	.10	.15⅜	.11⅞
Tung, imp	.25	.14	.3885	.34¾	.38	.21	.31½	.23½	.24	.20¼
Tallow, extra, loose	.07	.04⅜	.0971¼	.0862⅝	.26¾	.11¾	.06¾	.03⅞	.08⅜	.06
Wax, bees, crude, Af	.29	.27	.49	.37½	.59	.45	.51	.45	.56	.52
Candelilla, crude	.18½	.15½	.38	.33	.76	.62	.76	.74	.74	.63
Carnauba, No. 3, N.C., cr.	.48	.28¾	.79	.73½	1.58	.73	1.14	.87	.86	.70
Spermaceti, blocks	.22	.18	.26	.24	.50	.44	.28	.25½	.25½	.25½

Petroleum Products

	1939 H.	1939 L.	1942 H.	1942 L.	1947 H.	1947 L.	1953 H.	1953 L.	1954 H.	1954 L.
Oil, white, min., 125-135	.64½	.60½	.63	.49	.63	.54½	.595	.595	.595	.595
Paraffin, white, scale	.07	.0235	.04¼	.04¼	.06½	.06	.0660	.053	.0660	.055
Pentane	.08½	.08½	.08½	.08½	.17	.11	.14½	.12	.14½	.12
Petrolatum, amber	.04	.02⅝	.04⅝	.03⅜	.04¼	.04½	.0525	.0475	.0525	.0473
Petroleum, naphtha, arom.	.19	.16	.21½	.21½	.22½	.27	.275	.255	.275	.253
V.M.&P.	.10¼	.10½	.11	.11	.04¼	.04½	.0525	.0475	.0525	.0475
Propane, indust.	.03¾	.03	.03¾	.03⅜	.03¾	.03¾	.04	.04	.04	.03

Dyestuffs and Tanstuffs, Textile and Leather Chemicals

	1939 H.	1939 L.	1942 H.	1942 L.	1947 H.	1947 L.	1953 H.	1953 L.	1954 H.	1954 L.
Albumin, egg, edible	.75	.60	1.80	1.73	3.00	1.70	2.62	2.19	2.19	1.30
Annatto seed	.07½	.06½	.06½	.06	.19	.14	.26	.24	.24	.24
Chestnut ext., liquid	.01⅜	.01⅝	.02⅜	.02¼	.0435	.0435	.0530	.0510	.0510	.04¾
Cutch	.04¼	.04	.05¼	.04¾	.12	.12	.08½	.08	.08½	.08½
Dextrin, corn, white	3.50	3.30	4.00	3.95	8.09	5.19	.0853	.0853	.0853	.0853
Egg yolk, dried, dom	.67	.59	1.00	.87	1.20	1.15	1.48	.95	1.48	1.02
Fustic ext., cryst., No. 1	.24	.22	.24	.16	.42½	.41	.42½	.42½	.42½	.42½
Hydrogen peroxide, 35%	.20	.20	.16	.16	.15½	.15½	.2010	.2010	.2010	.1800
Indigo, synth., 20% paste	.16½	.16½	.16½	.16¼	.16½	.16½	.31	.28	.31	.31
Logwood ext., liq., No. 1	.10½	.09½	.12½	.12½	.18½	.18	.18½	.18½	.18½	.18½
Nutgalls, Aleppo	.29	.23	No prices		.52	.50	.38	.38	.38	.38
Potassium bichromate	.08⅞	.08¾	.09⅝	.09⅝	.11½	.10¾	.15	.14½	.15	.15
Quebracho ext., liq., 35%	.03½	.02⅝	.05⅝	.04½	.07½	.06	.08¼	.08¼	.08¼	.08¼
Sago flour, raw	.04	.02½	.05	.04½	.09½	.07	.07¾	.07	.07¼	.06½
Sodium bichromate	.06⅞	.05⅞	.07⅝	.07⅝	.09	.08¾	.11½	.11	.11½	.11½
Hydrosulphite	.16	.16	.17	.17	.19	.18½	.24½	.23	.23	.21½
Starch, corn, pearl, 100 lbs.	2.65	2.45	3.10	3.10	7.02	4.07	7.14	7.14	7.14	7.14
Valonia cups	39.00	30.00	No price		58.00	53.00	64.00	56.00	56.00	44.00

The rediscovery of VITAMIN B_6

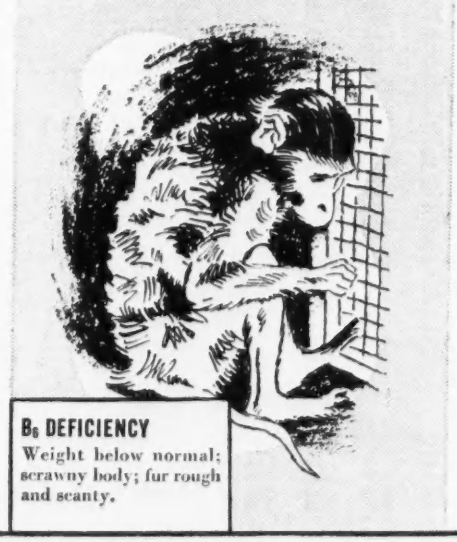
Recent studies demonstrate the essential need for

PYRIDOXINE

RECENT CLINICAL INVESTIGATIONS have confirmed the essential role of vitamin B_6 in infant nutrition. Convulsions were observed in young infants whose formulas lacked adequate amounts of vitamin B_6. Other data suggest that supplemental vitamin B_6 intake is desirable to guard against a deficiency that may accompany pregnancy.

A SPECIFIC SEBORRHEIC DERMATITIS is typical of B_6 deficiency and has responded readily to the vitamin. Vitamin B_6 has proved to be highly beneficial also in the treatment and prophylaxis of radiation sickness, with prompt control of nausea and vomiting. Experimental work indicates a distinct relationship between B_6 and arteriosclerosis in the monkey.

ADEQUATE B_6 INTAKE
Normal size and weight; well-developed body; sleek, glossy fur.



B_6 DEFICIENCY
Weight below normal; scrawny body; fur rough and scanty.

STUDIES at the Merck Institute for Therapeutic Research have disclosed striking differences between monkeys fed on a purified diet lacking in vitamin B_6 and those receiving the same diet plus vitamin B_6. While these studies do not necessarily apply to human beings, they nevertheless convey interesting implications about inadequate amounts of vitamin B_6 in the diet. Tremendous professional interest was aroused at leading medical conventions by an exhibit based upon this "living-proof" material. Merck conducts such scientific convention promotion to stimulate professional appreciation of vitamin products.

MERCK & CO., INC.
Manufacturing Chemists
RAHWAY, NEW JERSEY

MERCK

FIRST IN VITAMINS

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Chemicals, Oils and Drugs Price Changes in 1954

The following information is a compilation of prices for various chemicals and related products at the beginning of 1955 as compared with the beginning of 1954. The symbol 'N' signifies nominal; 'NP' no prices, while 'NS' indicates no stocks available.

A

	1954	1955
Acenaphthene, below 92.5°C M.P. dms., works lb.	.40	.40
over 92.5°C M.P., dms., works. lb.	.41	.41
Acetaldehyde, 99%, tanks, works. lb.	.10½	.10½
Acetanilide, tech., bbls., c.l., dlvd. lb.	.29	.29
USP, bbls., 2,000-lb. lots .. lb.	.61	.80
Acetic anhydride, tanks, frt. alld. E lb.	.14	.14
Acetoacetanilide, fib. dms., c.l., works lb.	.75	.80
Acetoacet-o-chloroanilide, fib. dms., dlvd lb.	1.27	1.35
Acetoacet-o-toluidide, fib. dms., dlvd lb.	.78	.82
Acetone, CP, tanks, dlvd .. lb.	.08½	.07½
Acetonitrile, dms., c.l., works lb.	.33	.45
Acetophenetidin, USP, bbls., works, frt. equald lb.	1.15	1.17
Acetophenone, cns., dms .... lb.	1.21	1.21
tech., l.c.l., dms., works .. lb.	.75	.75
Acetyl (N) para-aminophenol, dms., frt. adj lb.	1.75	1.75
Acetyltributyl citrate, tech., tanks lb.	.32	.32
Acetyltriethyl citrate, tech., tanks lb.	.36	.36
Acid, abietic, com'l., dms., c.l., works lb.	.12	.12
cryst., dms., c.l., works lb.	.05½	.05½
Acetic, com'l. or redist., 28°%, bbls. 100 lbs.	5.50	4.80
56%, bbls. 100 lbs.	9.65	8.25
70%, bbls. 100 lbs.	11.70	9.95
80%, bbls. 100 lbs.	12.45	10.45
glacial, synth., CP., dms., works 100 lbs.	15.00	15.00
tech., tanks, works 100 lbs.	9.00	10.00
USP, dms., works. 100 lbs.	24.00	24.00
Acetylsalicylic, USP, special, bbls., makers' primary distrib., point of ship't.. 100 lb. lots lb.	.60	.63
standard, fine, cryst., gran. (30-40 mesh), powd., (80 mesh), bbls., same basis lb.	.53	.58
Freight equald. for ship't. identical quantity over standard routes from N. Y., Phila., Midland, Mich., Chicago and St. Louis.		
Adipic, fib., drums, works lb.	.37	.35
p-Aminobenzoate, dms., 1,000-lbs. or more lb.	2.40	2.40
p-Aminosalicylate, dms., 1,000-lbs. or more frt. adjusted lb.	3.75	3.75
Aminoacetic, NF, bbls., frt. adjusted lb.	1.50	1.50
p-Aminobenzoic, tech., dms., works lb.	1.74	1.74
USP, dms., works lb.	2.50	2.50
m-Aminophenol, dist., dms., ton lots lb.	2.05	2.05
p-Aminosalicylic, dms., 1,000-lb. lots, frt. adj lb.	4.00	4.00
Anthranilic, bbls., frt. equald. lb.	1.21	1.21
Ascorbic, USP, dms., 25-50 kilo lots kilo.	21.00	16.00
Battery, cbys., c.l., works, E. 100 lbs.	2.35	2.35
Benzoic, tech., bbls., 100 lb. lots or more lb.	.44	.44
USP, bbls., 100 lb. lots or more lb.	.54	.54
Boric, tech., gran., bulk, c.l., works ton.	94.25	94.25
USP boric acid is $25 per ton higher.		
Broenner's, bbls. lb.	1.76	1.76
Butyric, 99%, tankcars, works. lb.	.32½	.32½
Cacodylic, bots. lb.	10.50	10.50
Camphoric, nat., dms. lb.	4.00	4.00
synth., dms. lb.	4.00	4.00
Capric, dms. lb.	.26¼	.23¾
Caprylic, dms. lb.	.32¾	.23¾
Casella, dms., frt. alld. .. lb.	1.44	1.44
Castor oil, dms. lb.	.35½	.35½
Chicago, bbls., frt. alld. .... lb.	3.21	3.21
Chloroacetic, mono-, purif., flake, 99%, dms lb.	.23½	.23½
tech., flake, 96-97%, frt. equald., dms lb.	.20	.21
o-Chlorobenzoic, fib. dms., works lb.	1.13	1.13
p-Chlorobenzoic, fib. dms., works lb.	1.59	1.59
Chlorosulphonic, tanks, frt. equald lb.	.0415	.0415
Cholic, fib. dms. lb.	NP	6.00
Chromic, 99½-99¾%, dms., c.l., works lb.	.27½	.27½
Cinnamic, refd., bots. .... lb.	2.50	2.50
Citric, anhyd., gran., fine gran., dms., c.l lb.	.28¾	.28¾
USP, gran., fine gran., bbls., c.l lb.	.27	.27
Anhydrous and USP powdered citric acid ½c. per lb. higher.		
Cleve's, mixed, bbls. lb.	.79	.79
Coconut oil, dist., tanks lb.	.25¼	.22½
dbl. dist., tanks lb.	.26	.23¼
Corn, dist., tanks lb.	.11¼	.13¼
Cottonseed oil, dist., dms lb.	.12	.12¾
2, 3-Cresotic, dms., ton-lots, works lb.	.66	.66
Cresylic, coaltar, dom., 50% 207°C or above, tanks, frt. equald gal.	.90	.90
204°-207 C, tanks, same basis gal.	.93	.93
Petroleum, 195°-213°C, tanks, same basis gal.	.58	.58
211°-236°C, tanks, same basis gal.	.50	.50
220°-242°C, tanks, same basis gal.	.50	.50
Imp., 75% at 215°C., dms., ex whse gal.	.75	.75
Crotonic, fib. dms., works lb.	.45	.44
Cyanoacetic, tech., bbls .... lb.	.90	.90
Dehydrocholic, injection, fib. dms., 10 to 100 lb. lots lb.	NP	14.75
oral, fib. dms., 10 to 100 lb. lots lb.	NP	10.25
Desoxycholic, fib. dms., 10 to 100 lb. lots lb.	NP	15.00
Diglycolic, bgs., works .... lb.	.14	.14
Ethylhexoic, tanks, works lb.	.33½	.33½
F, crude, paste, bbls., works lb.	2.10	2.10
Folic, bots. gram	1.60	1.40
Formic, 85%, cbys., c.l., works. lb.	.157	.157
90%, cbys., c.l., works .. lb.	.14½	.16¼
Fumaric, tech., bgs., dms. lb.	.27	.27

	1954	1955
Acid, gallic, NF VII, bbls., 1,000-lb. lots lb.	1.80	1.80
tech., bbls., 1,000-lb. lots lb.	1.58	1.58
Gamma, dry ground, bbls., frt. alld. lb.	1.50	1.50
Gentisic, 100 lb. fib. dms., lb.	8.50	8.50
Gluconic, tech., 50%, cbys., lb.	.19	.19
l-Glutanic, 99½%, dlvd., fib. dms., 100-lb. lots, works lb.	2.45	2.45
Glycerophosphoric, 35%, dms., works lb.	2.25	2.25
H, bbls., works, basis 100% lb.	.82	.82
Hydriodic, 1.50 s.g., cbys .. lb.	2.94	2.94
1.70 s.g., cbys lb.	3.23	3.23
Hydrobromic, medicinal, 48%, cbys., dlvd. E lb.	.37	.37
Hydrochloric, 18°, tanks, works. ton.	28.00	28.00
20°, tanks, works ton.	30.00	30.00
22°, tanks, works ton.	35.00	35.00
CP, USP, consumers, cbys., extra, c.l., works lb.	.11¾	.11¾
Acid hydrochloric, CP, USP, prices to dealers 1½c. per lb. less.		
Hydrocyanic, cyls., frt. alld. lb.	.75	.75
dilute, NF, 2%, 5-lb. bots. lb.	.40	.40
Hydrofluoric, anhyd., tanks, works lb.	.21	.21
70%, steel dms., works lb.	.18½	.18½
Hydroxyacetic, tech., 70% tanks, Belle, W. Va., 100% basis lb.	.095	.095
Hypophosphorous, purif., 30%, cbys lb.	1.30	1.30
Isonicotinic, 100 lb. fib. dms., works lb.	5.00	5.00
J, bbls., works, basis 100%. lb.	2.50	2.50
Koch, bbls., frt. alld lb.	.64	.64
L, bbls., frt. alld lb.	1.25	1.25
Lactic, edible, 50%, bbls., 20 or more lb.	.17	.17
80%, bbls., 5 or more lb.	.30	.30
USP, 85%, cbys lb.	.85	.85
plastic grade, 50%, bbls., 20 or more lb.	.21¾	.21¾
80%, bbls., 5 or more lb.	.3815	.3815
tech., 22%, bbls., c.l., works. 100 lbs.	6.30	6.30
44%, bbls., c.l., works. 100 lbs.	11.45	11.45
Laurent's, bbls. lb.	.60	.60
Lauric, 90%, dms. lb.	.39½	.35¼
Linseed oil, dist., dms lb.	.2055	.1805
w. w., dms lb.	.2355	.2103
Maleic, cryst., powd., dms lb.	.37	.37
Malic, tech. dms. lb.	.50	.50
Mandelic, NF, dms., 1,000-lb. lots lb.	2.35	2.35
Metanilic, dms., works lb.	.57	.57
Methacrylic glacial, 98%, dms., c.l., t.l., works lb.	.74½	.54½
Molybdic, 83-92%, dms., works lb.	1.27	1.32
Myristic, dist., dms. lb.	.28	.28
Muriatic (see Acid, hydrochloric)		
Naphthenic, 230-239 acidity, tanks, works lb.	.14	.13¼
Nevile and Winther's, dms., frt. alld lb.	1.20	1.20
Nicotinic, USP, dms., frt. adjusted kilo.	9.00	9.00
Nitric, 36° Be. cbys. c.l, works, E 100 lbs.	5.25	5.75
38° Be, cbys., c.l., works, E. 100 lbs.	5.75	6.25
40° Be. cbys., c.l., works, E. 100 lbs.	6.25	6.75
42° Be. cbys., c.l., works, E. 100 lbs.	6.75	7.25
60% HNO_3, tanks, works, basis 100% 100 lbs.	3.40	3.90
95% HNO_3, tanks, works, basis 100% 100 lbs.	4.40	4.90
CP, USP, consumers, cbys., extra, c.l., works. lb.	.13½	.13½
p-Nitrobenzoic, dms., c.l., works. lb.	.77	.72
Oleic, single-dist., tanks lb.	.13¼	.15½
double-dist., (white), tanks, lb.	.15¾	.18
Oxalic, bbls., c.l., works lb.	.16½	.16½
b-Oxynaphthoic, bbls., works. lb.	1.14	1.14
Palm oil, dbl. dist., dms lb.	.12¼	.14
Phenylacetic, pure, cryst., cns. lb.	.75	1.70
Phosphoric, food grade, 75%, tanks, works 100 lbs.	5.10	5.10
NF, 85%, cbys., c.l., works. lb.	.08½	.08½
Picric, NF, dms. lb.	.55	.55
tech., bbls. lb.	.32	.34
Propionic, syn., pure, tanks, works lb.	.19	.19
Pyrogallic, tech., bbls. lb.	2.76	2.76
Pyroligneous, dms., incl., l.c.l., works gal.	.36	.36
S, bbls., works lb.	3.25	3.25
Salicylic, crude, bgs. lb.	.38	.38
sublimed, tech., bbls lb.	.39	.39
dyestuffs, bbls., c.l. lb.	.41	.41
USP, cryst., bbls. lb.	.48	.48
powd., bbls lb.	.53	.53
Sebacic, purif., dms., c.l., works lb.	.74	.64
Soybean oil, dbl. dist., dms. lb.	.15	.17¼
s. d., dms lb.	.14½	.15¾
Stearic, dbl. pressed, bgs. lb.	.12¼	.14¼
single pressed, bgs. lb.	.12¾	.13¾
triple pressed, bgs. lb.	.15	.16½
Succinic, cryst., purif., works. lb.	.63	.62
Sulfanilic, tech., dms., frt. alld lb.	.19	.19
Sulfuric, 60° Be, tanks, works. ton.	18.60	18.16
66° Be, tanks, works ton.	22.35	22.35
96-100%, tanks, works ton.	21.00	23.50
CP, NF, consumers cbys, extra, c.l., works, frt. equald lb.	.09¾	.09¾
fuming, 20%, tanks, works E. ton.	25.00	25.00
Tallow, dist., dms. lb.	.12¼	.14
hydrogenated, dms. lb.	.13	.13¼
Tannic, NF, fluffy, bbls., 1,000-lb. lots lb.	1.59	1.59
powd., bbls., 1,000-lb. lots. lb.	1.50	1.50
tech., dms. lb.	.95	.95
Tartaric, USP, dom., bbls., 10,-000 lbs., 1 ship't.. lb.	.37	.41
imp., bgs lb.	.31	.36½N
Thioglycolic, refined, bbls., cbys., basis 100% lb.	1.60	1.80
Tobias, bbls., frt. alld lb.	.74	.74
Toluenesulfonic, dms., c.l., works lb.	.16	.16
p-Toluidine-m-sulfonic, bbls., works lb.	.92	.92
Trichloroacetic, bots. lb.	2.00	2.00
Tungstic, tech., kegs, works. lb.	4.25	4.25

	1954	1955
Aconite root, bls. lb.	.50	.50
Aconitine, amorph., mild, bots. oz.	27.50	27.50
cryst., potent, bots. oz.	78.00	78.00
Acrylonitrile, tanks, works . lb.	.31	.31
ACTH, bots gram.	20.00	15.00
Agar, USP, Kobe No. 1, strip, bbls lb.	2.50	2.90
powd., 30 mesh, fib. dms. lb.	3.00	3.40
dl-Alanine, dms., works .... lb.	8.50	8.50
Albumin, (egg), edible, flake, bbls lb.	2.19	1.30
powd., bbls. lb.	2.23	1.34
tech., cryst., bbls .... lb.	1.03	.85
blood, light, dms., l.c.l. .. lb.	.65	.65
Alcohol, allyl, tanks, dlvd lb.	.30	.30
Amyl, ex pentane, tanks, frt. alld.E. of Miss lb.	.15	.15
fermentation, refined, 123°-132° C, dms., l.c.l., dlvd., lb.	.33¾	.43
ACS grade, dms., l.c.l., dlvd lb.	.35¾	.45
ex-pentane, mixed amyls, tanks, frt. alld lb.	—	.15
primary, tanks, frt. alld lb.	—	.17¼
sec-synthetic, tanks, works. lb.	.17	.16
tert-synthetic, tanks, frt. alld. E lb.	.18	.15
Benzyl, NF, dms. lb.	.64	.64
tech., dms., dlvd lb.	.47½	.47½
n-Butyl, ferment., tanks, frt. alld lb.	.13	.13
n-synth., tanks, frt. alld lb.	.13	.13
sec synth., tanks, frt. alld, lb.	.11	.11
tert-synth., tanks, frt. alld. lb.	.12	.12
Capryl, 85%, tanks, works lb.	.15	.16½
95%, tanks, works lb.	.16½	.18
Cetyl, extra, fib., cns., 500-lb. lots or more lb.	.73	.73
NF, fib., cns., 140-lb. lots or more lb.	.58	.58
Cinnamic, bots. lb.	2.15	2.15
Decyl, bots lb.	1.75	1.75
Denatured, CD19, CD29, CD37, tanks, dlvd. E. of Rockies, gal.	.44½	.41½
Proprietary solvent, tanks, same basis gal.	.43	.43
SDI, tanks, same basis gal.	.45½	.42½
SD23H, tanks, same basis gal.	.44	.43
SD3A, tanks, same basis gal.	.43	.40
SD23A, tanks, same basis, gal.	.45½	.42½
SD-29, tanks, same basis gal.	.44½	.41½
SD30, tanks, same basis gal.	.43	.40
SD35A, tanks, same basis, gal.	.46	.43
SD40, tanks, same basis gal.	.44	.41
Diacetone, acetone-free, tanks, dlvd lb.	.12	.12
tech., tanks, dlvd lb.	.11½	.11½
Ethyl, 190 pf., USP, tax paid, tanks, dlvd. E. of Rockies, gal.	20.58	20.35
tax-free, tanks, same basis, gal.	.43	.40
absolute, 200 pf., tax paid, tanks, same basis gal.	21.48	21.45
2-Ethylbutyl, tanks, works lb.	.28	.28
2-Ethylhexyl, tanks, works lb.	.23½	.21¾
Furfuryl, tanks, works .. lb.	.184	.184
Isobutyl, tanks, works .... lb.	.12	.12
Isopropyl, refd., 91%, tanks, dlvd gal.	.37½	.35
95%, tanks, dlvd. gal.	.39¾	.37
99%, tanks, dlvd gal.	.42	.39
Lauryl, bots. lb.	2.00	2.00
Octyl, perfumers' grade, bots. lb.	1.75	1.75
2-Phenylethyl, dms. lb.	1.57	1.26
n-Propyl, tanks, dlvd lb.	.10	.10
Tetrahydrofurfuryl, tanks, Niagara Falls lb.	.43	.43
indust. grade, tanks, Niagara Falls, N. Y. lb.	.29	.29
Aldrin, 60% soln., dms., c.l., works, frt. alld lb.	.538	.538
Aldol, 95%, dms., works .... lb.	.23	.23
denaturing grade, dms .. gal.	2.15	2.15
Aletris, root, bgs. lb.	1.75	1.75
Allethrin, 100%, dms., frt. alld. lb.	32.00	32.00
90%, dms., frt. alld lb.	28.80	28.50
soln., 20%, dms., 100-lb. bots., frt. alld lb.	6.50	6.50
2½%, dms., frt. alld gal.	.90	.90
Allyl bromide, cbys., works lb.	1.35	1.35
Chloride, tanks, dlvd. lb.	.15	.15
Starch, solid, dms., works lb.	.53¾	.52¾
soln., 40% toluol-butanol, dms., works lb.	.25½	.25½
Aloe, Cape, cs. lb.	.29	.40
powd., cs lb.	.38	.50
Curacao, kgs. lb.	.50	.50
Socotrine, kgs. lb.	NP	NP
Aloin, USP, bbls., dms., kgs lb.	3.75	3.75
Alum, ammonium, gran., bbls., works 100 lbs.	4.30	4.30
lump, bbls., works 100 lbs.	5.05	5.05
powd., bbls., works 100 lbs.	5.20	5.20
USP, burnt, dms. lb.	.20	.20
Potassium, gran., bbls., works, 100 lbs.	4.55	4.55
lump, bbls., works 100 lbs.	5.30	5.30
USP, burnt, dms. lb.	.20	.20
hydrous, dms. lb.	.07¾	.07¾
Potash-chrome, bbls. lb.	.17	.17
Sodium, bbls., c.l., works. 100 lbs.	4.60	4.60
Alumina, calcined, bgs., c.l., works lb.	.0385	.0385
Aluminum acetate, basic soln., 24%, bbls., l.c.l., works lb.	.14	.14
chloride, coml., anhyd., dms., c.l., works, frt. equald lb.	.15	.15
cryst., dms., c.l., works lb.	.1030	.1030
soln. 32°, tanks, works, 100 lbs.	.0369	.0369
NF, gran., dms., works lb.	.29	.29
Fluoride, tech., anhyd., bgs., c.l., works lb.	.1540	.1575
Formate, basic soln., cbys lb.	.09½	.09½
Hydrate, heavy, bgs., c.l., frt. equald lb.	.03	.028
light, bgs., dlvd lb.	.17	.17
Hydroxide gel., pharmaceutical, 14-15%, Al_2O_3, contract, works lb.	.22	.22
9-9½%, Al_2O_3, contract, works lb.	.18	.18
dried, USP, XIV, contract, dms lb.	.82½	.82½
Laurate, precip., bbls lb.	.44	.44
Metal, 99%, ingots, 10,000 lbs. lb.	.215	.222
pigs, 10,000 lbs. lb.	.20	.205

Acenaphthene—Anthracene

	1954	1955
Aluminum oxide, amorphous (see Alumina, calcinated),		
Paste, lining, extra fine, dms. lb.	.63½	.63½
standard, dms. lb.	.41	.43
Powder, lining, extra fine, dms lb.	1.02½	1.02½
standard, dms. lb.	.72	.72
Aluminum powder and paste prices are f.o.b. shipping point.		
Resinate, precip., dms., frt. alld lb.	.27½	.27½
Stearate, dibasic, ctns., c.l. lb.	.33	.33
monobasic, ctns., c.l. lb.	.33	.33
tribasic, ctns., c.l. lb.	.33	.33
Sulfate, com'l., bgs., c.l., works, frt. equald 100 lbs.	1.85	1.85
ground, bgs., works ton.	37.00	37.00
lump, bgs., works ton.	40.00	40.00
iron-free, bgs., c.l., works, frt. equald 100 lbs.	3.55	3.55
USP, gran., dms., works lb.	.13	.13
powd., dms., works lb.	.14	.14
Ambergris, gray, bots oz.	8.00	8.00
Aminoazotoluene, bbls lb.	1.03	1.03
o-Aminobipnenyl, tanks, works. lb.	.37	.37
Aminoethyl ethanolamine, tanks, works lb.	.45	.45
2-Amino-2-methyl-1-propanol, cns., dms., works lb.	.60	.60
m-Aminophenol, dist., dms., ton lots lb.	2.05	2.05
p-Aminophenol, dms., frt. alld. lb.	.97	.97
Aminophylline, USP, 100-lb. dms., lb.	3.05	3.55
Aminopyrine, USP, bots., dms. lb.	4.25	4.25
p-Aminosalicylate, fib. dms., 1,000-lb. lots or more, frt. adjusted lb.	7.00	7.00
Ammonia, anhyd., fertilizer, grade, tanks, works ton.	85.00	85.00
pure, cyls., extra, zone 1 lb.	.18½	.18½
refrigeration, tanks, works. ton.	87.50	87.50
Aqua (29.4% NH_3), tanks, works, anhyd., basis ton.	96.00	96.00
Ammoniac, sal, gray, bgs., c.l., works, frt. equald 100 lbs.	8.25	8.25
white, gran., bgs., c.l., works. (see Ammonium chloride, tech.)		
Ammoniacal liquor, tankcars, anhyd. basis ton.	96.00	96.00
Ammonium acetate, purif., dms lb.	.38	.38
Benzoate, USP, dms., kgs., 4,000 lb. lots, frt. alld lb.	.80	.80
Biborate, gran., dms., c.l., works ton.	312.00	317.00
Bicarbonate, dom., dms., c.l., works 100 lbs.	6.50	6.50
imported, dms., l.c.l. lb.	.07¼	.07¼
Bichromate, bbls., works lb.	.34½	.42
Bifluoride, dms., dlvd. lb.	.2145	.2145
Bromide, NF, gran., bbls lb.	.38	.38
Powdered ammonium bromide 10c. per lb. higher.		
Carbonate, USP, lump, powd., dms lb.	.23	.23
Chloride, USP, bbls., dms., lb.	.17¼	.17¼
Citrate, diabasic, bbls. ... lb.	.75	.75
Hypophosphite, NF, dms .. lb.	2.40	3.07
Iodide, NF, bots, jars .... lb.	4.26	4.26
Linoleate, 80%, dms., works, lb.	.50	.50
Nitrate, fertilizer grade, Canadian, eastern, 33.5% N, bgs., c.l., shipping point ton.	77.50	74.50
western, 33.5% N, f.o.b. Los Angeles, bgs ton.	89.84	84.89
dom., bgs., western works. ton.	68.00	68.00
Oleate, 75%, dms., works lb.	.55	.55
Oxalate, fine gran., cns., dms. lb.	.25	.25
Pentaborate, gran., bbls., c.l., works ton.	222.00	227.00
Ammonium pentaborate powder, $10 per ton higher.		
Perchlorate, kgs., works .. lb.	.50	.50
Persulfate, kgs. lb.	.38	.38
Phosphate, coml., bgs., c.l., works, frt. equald lb.	.08½	.0865
dibasic, NF V, bbls., dms., lb.	.45	.45
tech., bgs., c.l., works, frt. equald lb.	.08½	.0865
Salicylate, NF, dms., kgs lb.	1.34	1.62
Silicofluoride, dms., works lb.	.11	.11
Sulfamate, bbls., dms., works, lb.	.18	.18
Sulfate, coke-oven, bulk, producing ovens ton.	44.00	42.00
syn., bgs., c.l., western, works ton.	49.50	44.00
bulk, works ton.	45.00	42.00
purif., dms., works lb.	.08½	.08½
Sulfide, liq., 40-44° basis 100%, tanks, frt. alld ton.	240.00	240.00
Thiocyanate, tech., dms., c.l., works lb.	.18	.20
Thioglycollate, com'd., cbys., 100% basis lb.	1.60	1.60
highly purified, cbys., same basis lb.	1.70	1.70
Thiosulphate, cryst., photo grade, fib. dms., frt. alld lb.	.65	.65
60%, solution, dms., c.l., works lb.	.06½	.06½
Amphetamine hydrochloride, dibasic, dextro, bots lb.	28.00	28.00
dextro-laevo, dms. lb.	6.00	6.00
monobasic, dextro., bots lb.	28.00	28.00
Phosphate, dibasic, dextro, bots lb.	28.00	28.00
Sulphate, dextro, dms. .... lb.	28.00	28.00
dextro-laevo, dms. lb.	6.00	6.00
Amyl acetate, ex fusel oil, tech., tanks, frt. alld. E. of Rockies lb.	.15	.15
ex pentane, tanks, frt. alld. E. of Rockies lb.	.18	.15
Butyrate, dms. lb.	.90	.90
Cinnamic aldehyde, dms. .. lb.	1.70	1.70
Nitrite, USP, bots. lb.	1.75	1.75
Salicylate, cns., dms. lb.	.74	.74
o-tert-Amyl phenol, tanks, works. lb.	.41¾	.41¼
Anethol, NF, cns., dms. .... lb.	1.25	1.25
Angelica root, dom., bls. .... lb.	.60	.60
Aniline, oil, tanks, works, frt. alld lb.	.20	.20
Salt, dms., c.l., t.l., frt. alld. lb.	—	.31
Anise, Mexican, bgs. lb.	.22	.26
Spanish, bgs. lb.	.22N	.38
Syrian, bgs. lb.	.20	NP
Turkish, bgs. lb.	.26N	NP
Anisic aldehyde, bots., dms lb.	1.80	1.80
Anthracene, 90-95%, bbls., ton lots, works lb.	.70	.70

o-Anisidine—Blue, Soda, CP

		1954	1955
o-Anisidine, bbls	lb.	.88	.88
p-Anisidine, dms., works	lb.	.97	.97
Anthraquinone, 99.5%, bbls., c.l., frt. alld	lb.	—	.83
Antimony butter (see Antimony trichloride).			
Metal, bulk, c.l., mines	lb.	.28½	.28½
Oxide, bgs., c.l., frt. alld	lb.	.26	.29
Sulfide, 62-64%, bgs., dlvd	lb.	.30	.27
Trichloride, pails, c.l., works	lb.	.38½	.38½
Antimony potassium tartrate, tech., gran. or powd., bbls., kgs	lb.	.56	.59
USP, powd., bbls., dms., kgs.	lb.	.61	.61
Antipyrene, NF, dms.	lb.	2.50	2.50
Apomorphine hydrochloride, USP, bots	oz.	23.40	23.40
Areca nuts, powd., bbls.	lb.	.15	.15
Arecoline hydrobromide, NF, bots., tins	oz.	4.50	4.50
Arginine monohydrochloride, laevo, dms., 1 kilo lots.	kilo.	77.00	74.80
Argols, min., 50%, bgs., shipment ports, per 100 kilos., basis 100%	kilo.	NP	25.00
Arnica, flowers (true Montana), bbls	lb.	.70	3.00N
Arsenic, metal, lump, bbls., USP, prompt shipment	lb.	.70	.54
Trioxide, USP, dms	lb.	.48	.48
White, powd., bbls., c.l., dlvd.	lb.	.05½	.05½
Asafetida, es	lb.	.36	.36
powd., bbls., dms	lb.	.50	.50
Sulfhydrate, flake, 70-72	dms.,		

		1954	1955
Asbestos, Canadian, crude, No. 1, c.l., (20 tons), mines	ton.	1,300.00	1,300.00
No. 2, c.l., (20 tons), mines.	ton.	675.00	675.00
Run-of-mine, c.l., (20 tons), mines	ton.	556.00	556.00
3K, c.l., (20 tons), mines.	ton.	436.00	436.00
3R, c.l., (20 tons), mines.	ton.	371.00	371.00
3T, c.l., (20 tons), mines.			
c.l., (20 tons), mines.	ton.	348.00	348.00
3Z, c.l., (20 tons), mines.	ton.	321.00	321.00
4K, c.l., (20 tons), mines.	ton.	173.00	173.00
4M, c.l., (20 tons), mines.	ton.	173.00	173.00
4T, c.l., (20 tons), mines.	ton.	156.00	156.00
4Z, c.l., (20 tons), mines.	ton.	156.00	156.00
5D, c.l., (20 tons), mines.	ton.	122.50	122.50
5K, c.l., (20 tons), mines.	ton.	122.50	122.50
5M, c.l., (20 tons), mines.	ton.	116.50	116.50
5R, c.l., (20 tons), mines.	ton.	110.00	110.00
6D, c.l., (30 tons), mines.	ton.	78.00	78.00
7D, c.l., (30 tons), mines.	ton.	68.50	68.50
7F, c.l., (30 tons), mines.	ton.	65.00	65.00

		1954	1955
Asbestos, Canadian, 7H, c.l., (30 tons), mines	ton.	55.00	55.00
7K, c.l., (30 tons), mines.	ton.	46.00	46.00
7M, c.l., (30 tons), mines.	ton.	40.00	40.00
7R, c.l., (30 tons), mines.	ton.	39.00	39.00
7 RF, c.l., (30 tons), mines.	ton.	40.00	40.00
7T, c.l., (30 tons), mines.	ton.	37.00	37.00
7TF, c.l., (30 tons), mines. c.l., (30 tons), mines.	ton.	40.00	40.00
8S, c.l., (30 tons), mines.	ton.	27.00	27.00
Asbestos c.l. prices are in U. S. funds, lots $4 per ton higher.			l.c.l.
Asphalt, gilsonite, black, jet, bgs., c.l., mines	ton.	34.00	37.00
select, 350°F, fusing point, bgs., c.l., same basis	ton.	38.00	38.00
270-295°F, fusing point, bgs., c.l., same basis	ton.	37.00	37.00
jet, bgs., c.l., same basis.	ton.	34.00	32.00
Manjak, No. 10, crude, dms., works	lb.	.06½	.06¼
Petroleum, cut-back, tanks, tankwagons, ref'y.	gal.	.09	.09
emulsion, tanks, tankwagons, ref'y.	gal.	.09½	.09½
steam-refd., less than 80 penetration, tanks, tank-wagon, refinery	ton.	22.00	21.00
80-300 penetration, tank-wagon, refinery	ton.	21.00	20.00
Atropine, USP, bots	oz.	8.00	7.00
sulfate, USP, bots	oz.	4.00	4.00

B

		1954	1955
Bacitracin, bulk, 1,000,000,000 or more units	50,000 units.	.70	.70
Balm of Gilead, buds, dried, bgs.	lb.	1.35	1.35
Barberry root bark, bgs	lb.	.28	.28
Barbital, USP, 100-lb., dms	lb.	4.50	4.50
Sodium, USP, dms.	lb.	4.75	4.75
Barium carbonate, precip., bgs., c.l., works	ton.	92.50	92.50
Chlorate, kgs., works	lb.	.32	.32
Chloride, anhyd., bgs., c.l., works	ton.	158.00	158.00
NF, cryst., dms	lb.	.18	.18
Chromate, bgs., frt. equald	lb.	.35	.35
Dioxide (see Oxide).			
Hydrate, crystals, bgs	ton.	190.00	180.00
Nitrate, bbls., c.l., works	lb.	.12½	.12½
Oxide, grd., dms., works	ton.	255.00	255.00
Peroxide, dms., works	lb.	.16	.16
Stearate, ctns., c.l.	lb.	.37	.37
Sulfate, X-ray, bbls.	lb.	.14	.14
Sulfide,, dms., c.l., works	ton.	85.00	85.00
Barytes, southern off color, bgs., mines	ton.	25.00	25.00
95.75%, bgs., mines	ton.	25.00	25.00
water-grd., paper bgs., c.l., St. Louis	ton.	41.60	41.60
Bauxite, bulk, mines	ton.	9.50	10.00
Belladonna, leaf, bls	lb.	.28	.35
Root, bls	lb.	.45	.45
Bentonite, dom., 200 mesh, bgs., works	ton.	14.00	14.00
Italian, white, high gel., bgs.,	ton.	80.60	80.60
low gel., bgs., 10 tons to c.l., ex dock	ton.	78.95	78.95
Benzal chloride, cbys., works	lb.	.22	.22
Benzaldehyde, NF, dms	lb.	.74	.74
tech., cbys., dms	lb.	.44	.44
Benzene hexachloride, 99% gamma isomer (see Lindane).			
tech., bgs., dms., c.l., works, gamma unit-	lb.	.009	.0075
gamma, 50% dust, dry, distributors, dms., c.l., dlvd., gamma unit-	lb.	.015	.013
wet, distributors, dms., c.l., dlvd., gamma unit-	lb.	.02	.02
Benzidine hydrochloride, bbls., frt. alld	lb.	1.00	1.00
Benzocaine, cns	lb.	3.48	3.48
Benzol, pure or nitration, tanks, works, Bethlehem, Pa.	gal.	.40	.36
Birmingham dist	gal.	.40	.36
Chicago district	gal.	.40	.36
Cleveland district	gal.	.40	.36
Geneva, Utah	gal.	.40	.36
Johnstown, Pa	gal.	.40	.36
Lackawanna, N. Y.	gal.	.40	.36
Lone Star, Texas	gal.	.41	.36
Minnequa, Colo	gal.	.39	.35
Philadelphia, Pa	gal.	.40	.36
Pittsburgh district	gal.	.40	.36
Sparrows Pt., Md.	gal.	.40	.36
Syracuse, N. Y.	gal.	.40	.36
Terre Haute, Ind.	gal.	.40	.36
Youngstown, Ohio	gal.	.40	.36
Benzophenone, dms	lb.	1.40	1.40
Benzotrichloride, cbys., frt. alld.	lb.	.18	.18
Benzoyl chloride, cbys., dms., c.l., works, frt. equald	lb.	.21½	.22
Peroxide, pure, fib. ctns., works	lb.	.90	.90
Benzyl acetate, f.f.c., dms	lb.	.62	.62
Benzoate, USP, f.f.c., cns., dms.	lb.	.62	.62
Chloride, tech., cbys., c.l., works, frt. equald	lb.	.20½	.21
Cinnamate, cns	lb.	3.30	3.35
Formate, cns	lb.	1.30	1.30
Propionate, bots	lb.	1.35	1.35
Salicylate, bots.	lb.	1.55	1.50
Benzilidinacetone, bots	lb.	1.68	1.68
Benzylisoeugenol, bots	lb.	8.60	8.60
Berberine disulphate, cns	lb.	25.00	25.00
Hydrochloride, bots	lb.	35.00	35.00
Biotin, cryst., bots	gram.	10.00	10.00
Bismuth, chloride, jars	lb.	5.11	5.11
Hydroxide, dms	lb.	4.65	4.65
Metal, bxs., ton lots	lb.	2.25	2.25
Nitrate, cryst., dms	lb.	2.10	2.10
Oxide, anhydrous, dms	lb.	4.47	4.47
Oxychloride, dms	lb.	4.32	4.32
Phenolsulphonate, fib. dms	lb.	5.22	5.22
Subcarbonate, USP, dms	lb.	3.20	3.20
Subgallate, NF, fib. dms	lb.	3.15	3.15
Subiodide, fib. dms	lb.	5.37	5.37
Subnitrate, NF, dms	lb.	2.65	2.65
Subsalicylate, USP, dms	lb.	3.50	3.50
Bismuth-ammonium citrate, USP, powd., jars	lb.	4.22	4.22
Black, acetylene, bgs., c.l., works.	lb.	.17	.17
Bone, dms., l.c.l., frt, alld	lb.	.15½	.17
Pacific coast bone black prices, 2c. per lb. higher.			
Carbon, channel, pigment, high color, beads, ctns., c.l., works	lb.	NP	.72
uncompressed, regular, bgs., c.l., works	lb.	.12	.12
furnace, fast extruding, bgs., c.l., works	lb.	.06	.06
high abrasion, bulk, c.l., works	lb.	.07½	.07½
high modulus, bgs., c.l., works	lb.	.05½	.05½
semi-reinforcing, bgs., c.l., works	lb.	.04½	.04½
Iron oxide, pure, bgs., c.l., works	lb.	.12¾	.12¾
Lamp, bgs., c.l., works	lb.	.16	.16
Mineral, bgs., works	lb.	.0160	.0160
Blackberry root bark, bls	lb.	.50	.45
Black haw, root bark, bls	lb.	.65	.65
Tree bark, bls	lb.	.40	.40
Blanc fixe, dry, by-product, bgs., c.l., works	ton.	155.00	190.00
direct process, bgs., c.l., works	ton.	100.00	100.00
Bleaching powder, dms., c.l., works	100 lbs.	5.02	5.02
Blood, dried, 16-16½% ammo., bgs	unit-ton.	7.50	6.75
high-grade, unground, 16-17% ammo., bulk, Chicago	unit-ton.	8.00	6.75
Soluble, bgs., c.l.	lb.	.17	.15
Bloodroot, bls	lb.	.60	.48
Blue, alkali, dry, bbls., dlvd. N. of Tenn. and N. C. E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis	lb.	2.00	2.00
toner, bbls., litho flushed, same basis	lb.	1.15	1.15
Chinese, bbls., same basis	lb.	.48	.49
Cobalt, genuine, bbls., same basis	lb.	4.90	4.90
Methyl violet, toner, molybdated, PMA, bbls., same basis	lb.	2.60	2.60
tungstated, PTMA, bbls., same basis	lb.	3.95	3.85
Milori, bbls., same basis	lb.	.48	.49
Peacock, fugitive, 100% color strength, bbls., same basis.	lb.	.75	.75
Phthalocyanin, full strength, bbls., same basis	lb.	3.45	3.45
Potash, CP, bbls., same basis	lb.	.56	.56
Prussian, insol., bbls., same basis	lb.	.48	.49
soluble, bbls., same basis	lb.	.48	.49
Soda, CP, bronze, bbls., same basis	lb.	.56	.56

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YOUR BEST SOURCE OF ORGANIC SULFUR...

Sharples now offers chemical manufacturers and the process industries a wide selection of Sulfur Compounds possessing these outstanding advantages:

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- C_3-C_4 MERCAPTANS
- AMYL MERCAPTAN
- tert-DODECYL MERCAPTANS

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- Diethyl Sulfide

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Degreasing Trichlorethylene • Carbon Tetrachloride • Perchlorethylene Sodium Cyanide • Potassium Cyanide • Zinc and Copper Cyanide Chromic Acid • Cadmium Oxide • Nickel Anodes • Cadmium Anodes Zinc Anodes • Copper Anodes • Nickel Sulphate • Nickel Chloride Nickel Carbonate • Potassium Nitrate

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Copper Sulphate Crystals • Copper Sulphate Basic • DDT Muriate of Potash • Synthetic Detergents • Ammonium Sulphate Urea • Dicalcium Phosphate • Superphosphate Single and Triple Specially Formulated Fertilizers

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Formic Acid • Calcium and Sodium Formate • Bicarbonate of Soda Sodium Sulphide and Sulphhydrate • Ammonium Bicarbonate Bichromate of Soda • Ammonium Sulphate

FOR TEXTILES

Caustic Soda • Soda Ash • All Phosphates • Acetic Acid Glauber Salt • Sodium Hydrosulphite • Bichromate of Soda Sodium Perborate • Urea

FOR GLASS, PAPER, PULP

Barium Carbonate • Barium Chloride • Caustic Soda Soda Ash • Sodium Peroxide • Sodium Aluminate Formaldehyde • Iron-Free Alum • Sodium Bisulphite

FOR TEXTILE SPECIALTIES

Diethylene and Ethylene Glycols • Caustic Potash and Soda Carbonate of Potash • Zinc Sulphate • Zinc Chloride Acetic Acid • All Phosphates • Sodium Cyanide Phosphorous Trichloride • Monoethanolamine • Diethanolamine Triethanolamine • Ethylene Diamine

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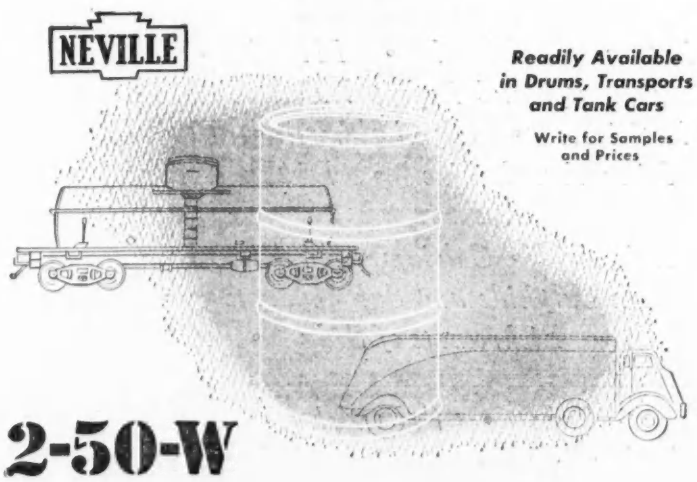
Blue, Ultramarine—Chalk

	1954	1955
Blue, ultramarine, cobalt-type, dry or pulp, bbls., same basis	lb. .30½	.30½
regular types, dry or pulp, bbls., same basis	lb. .22½	.22½
Victoria toner, molybdic, bbls.,	lb. 4.10	4.10
tungstated, PTMA, bbls	lb. 5.15	5.00
Blue dry colors, dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c), Miss., N. C., S. C., Tenn., Tex. (El Paso, 2c), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1c. higher, Pacific Coast, Denver, Pueblo, Salt Lake City, Wichita frt. equalized with Chicago.		
Bonemeal, steamed, works, E.	ton.55.00	68.00
Borax, tech., anhyd., bulk, c.l., works	ton.70.00	78.00
gran., decahydrate, bulk, c.l., works	ton.35.75	41.25
Borax packed in kgs. is $45.50 per ton higher than borax packed in paper bags. USP borax, $15 per ton higher than tech.		
Bordeaux mixture, bgs., c.l., works, frt. alld., or nearest whse. point	lb. .16	.18
Borneol, crs	lb. 2.85	2.50
Borontrifluoride gas, cyls., truckload, works	lb. .62	.62
Bromine, purif., cs., c.l., frt. alld. E. of Rockies	lb. .27	.31
dms., lead-lined, dlvd	lb. .28	.30
Bromoform, pharmaceutical grade, cbys	lb. 1.52	1.52
Bromstyrol, bots	lb. 5.40	5.40
Brown, iron oxide, syn., bgs., l.c.l., works	lb. .13⅜	.13¾
Oxide, metallic, bgs., works	lb. .04	.04
Sienna, burnt, paper bgs., c.l., works	lb. .04¼	.04½
raw, paper bgs., c.l., works,	lb. .04½	.04½
Umber, burnt, American, bgs., c.l., works	lb. .06	.06
Turkey type, bgs, c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va	lb. .06¼	.06¾
raw, American, bgs., works,	lb. .05¾	.06¼
Turkey type, bgs., works,	lb. .06¼	.06¾
Vandyke, bbls., works	lb. .09½	.09½
Brucine, crs., 100 oz. lots	oz. .20	.20
Sulfate, NF, crs., 100 oz. lots,	oz. .15	.15
Buchu leaves, bls	lb. .45	.50
Butadiene, tanks, refy	lb. .15	.15
Butane, indust., tanks, group 3,	gal. .04	.03½
N. Y. harbor	gal. .08	.08
n-Butyl acetate, ferment., tanks, frt. alld	lb. .13	.13
n-synthetic, tanks, dlvd. E.	lb. .13	.13
sec-synthetic, tanks, dlvd. E.	lb. .10¾	.10¾
Chloride, dms., c.l., works	lb. .37½	.37½
Lactate, tanks, frt. alld. E of Rockies	lb. .33	.33
Laurate, dms., works	lb. .39	.39
Oleate, refd., dms., l.c.l., works	lb. .36	.36
Phenylacetate, dms	lb. 4.50	4.50
Stearate, dms., l.c.l., frt. alld.	lb. .24	.24
6-tert-Butyl-m-cresol, tanks, works	lb. .48	.48
Butyraldehyde, tanks, dlvd	lb. .19½	.19½

C

Cadmium, iodide, jars	lb. 6.25	6.25
Metal, ingots or sticks, cs., dlvd	lb. 2.00	1.70
Caffeine, nat., USP, cryst., dms., 100 lbs. or more	lb. 2.80	3.35
anhyd., dms.	lb. 3.00	3.15
syn., USP, cryst., dms., 100-lbs. or more	lb. 2.80	3.35
anhyd., dms., 100 lbs. or	lb. 3.00	3.15
citrated, USP, dms., 100 lbs. or more	lb. 2.65	2.90
Calamine, USP, dms	lb. .34	.34
Calciferol, cryst., vials, 25 to 100 gms. or more, works	gram .90	.80
Calcium arsenate, dealers, dms., c.l., whse., works, frt. alld. on 96 lbs. or over	lb. .09	.09
Bromide, NF, jars	lb. .90	.90
Carbide, standard generator size, dms., c.l., dlvd	ton.134.40	134.40
Carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works	ton. 7.50	7.50
chalk, whiting, 325 mesh, bgs., works	ton.32.00	32.00
water-grd., ½ to 10 microns, bgs., c.l., works	ton.30.00	30.00
10 to 20 microns, bgs., c.l., works	ton.17.00	17.00
precip., dense, bgs., c.l., works	ton.30.00	30.00
Calcium carbonate, medium, bgs., c.l., works	ton.35.00	35.00
surface treated, bgs., c.l., works	ton.35.00	35.00
ultrafine, bgs., c.l., works,	ton.110.00	110.00
Chloride, cryst., purif., bbls., jars	lb. .27	.27
flake, 77-80%, paper bags, c.l., works, frt. equald,	ton.27.00	27.00
liquor, 40%, tanks, works, frt. alld.	ton.11.35	11.35
pellets, bgs., c.l., works	ton.33.00	33.00
powd., bgs., c.l., works	ton.37.65	37.65
solid, 73-75%, dms., c.l., works, frt. equald	ton.25.50	25.50
USP, gran., bbls	lb. .34	.40
Chromate, bgs., frt. equald	lb. .29½	.29½
Cyanide, dms., dlvd. E. of Rockies	lb. .24	.24
Gluconate, AA, bbls., dms	lb. .70	.70
USP, bbls., dms	lb. .63	.63
Glycerophosphate, NF, fib. dms.	lb. 2.30	2.30
Hydride, dms., works	lb. 2.20	2.15
Hypochlorite, high test, cns., cased (45 lbs.), dlvd., E. of Rockies	cs.22.60	22.60
Hypophosphite, dms., ton lots or less	lb. .90	.90
Iodide, jars	lb. 4.52	4.52
Lactate, USP, dms., 10,000 lb. lots or more, works	lb. .40	.40
Mandelate USP, dms., works,	lb. 2.10	2.10
Naphthalene, liq., 4%, Ca., dms., frt. equald	lb. .27¼	.27¼
Nitrate, fertilizer grade, bgs., c.l., Los Angeles	ton.48.00	46.00
tech., cms., works	lb. .13	.13
Pantothenate dextro, jars, 100 gms. or more, frt. adjusted.	gram .07½	.07½
Phenolsulphonate, dms	lb. .70	.70
Phosphate, dibasic, USP, bgs., c.l. 100 lbs.	7.10	7.10
feed grade, bgs., c.l., works,	ton.75.00	74.00
monobasic, bgs., 10,000 lb. lots, works, frt. equald.	100 lbs. 6.40	6.05
tribasic, precip., NF, bgs., c.l., works	100 lbs. 7.60	7.60
Phytate, bgs., works	lb. .28	.28
Resinate, precip., dms., alld., works	lb. .27¾	.27¾
Silicate, hydrated, bgs., c.l., works	lb. .06	.06
Stearate, cns., c.l.	lb. .35	.35
Calomel, USP, powd., dms	lb. 4.02	5.42
Camphene, 46° m.p., tanks, works	lb. —	.103
Camphor, monobromated, NF, dms., kgs	lb. 3.00	3.00
natural, USP, powd., 100-lb. lots, bbls	lb. .51	.60
tablets, 1 oz., ½ oz., cs	lb. .63	.75
synth., tech., bbls., 1,500-lb. lots, works	lb. .55½	.52
USP, gran., powd., bbls., 2,000-lb. lots	lb. .57	.59
tablets, tins, 2,000-lb. lots.	lb. .90	.90
Cantharides, Chinese, cs	lb. 2.00	2.00
powd., bxs	lb. 2.25	2.25
Russian, bgs	lb. 4.00	4.00
powd, bxs	4.35	4.35
Capsicum oleoresin, NF, from dom. peppers, cns	lb. 4.25	4.50
from African peppers, dms.,	lb. 4.75	4.35
Caraway seed, Dutch, bgs	lb. .12	.20½
Carbazole, 97% bbls., ton lots, works	lb. 1.05	1.05
Carbon disulfide, 55-gal. dms., c.l., works, frt. alld., to competitive points	lb. .07½	.07½
Dioxide, industrial, wholesale, cyl	lb. .08	.08
Tetrachloride, CP, dms., works,	lb. .11	.10½
tech., tanks, E. of Rockies, frt. alld	lb. .09¼	.08½
W. of Rockies, f.o.b. stockpoints	lb. .09¾	.09
Carbromal, NF, dms., 100 lb. lots, works	lb. 4.00	4.00
Cardamom, fruit, bleached, cs	lb. 3.30	3.75
medium, cs	lb. 3.10	3.30
decorticated, Alleppey, cs.	lb. 1.70	1.85
Guatemala, bgs	lb. 1.74	1.80
Mangalore type, cs	lb. 195N	NP
green, Alleppey, bgs	lb. 1.50	2.00
Ceylon, bgs	lb. 1.50	2.00
Carmine, No. 40, NF, bulk, 100 lbs. or more, dlvd	lb. 6.50	7.80
Carotene, technical, 1,350,000 A units per gram, tins, works,	gm. .55	.55
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works, 1,000,000 units.	.18	.18
microcrystalline in oil, 400,000 A units per gram, tins, works, 1,000,000 units.	.33	.33
Carvol, bots	lb. 4.75	4.75
Cascara, sagrada bark, bulk	lb. .34	.30
Cascin, dom., acid-precip., standard, bgs., 10,000 lbs. or more, shipt point	lb. .28	.27
premium, bgs., 10,000 lbs. or more, shipt point	lb. .35	.35
imported, Argentine, acid-precip., grd., 100-bg. lots or more, ex dock	lb. .21	.21½
Cashewnut, shell liquid, treated, dms., c.l., f.o.b. Newark, N. J.	lb. .22	.22
Cassia, Batavia, cuttings, bls.	lb. .17¼	.16½
longstick	lb. .19	.18½
shortstick, bls.	lb. .18	.17½
Saigon, broken, bls	lb. NS	NP
medium, bls	lb. 1.25	NP
thin, bls	lb. NS	NP
Castor beans, bgs., f.o.b., Brazilian ports	long ton.105.00N	104.00
Pomace, bgs., c.l., works	ton.25.00	35.00
Castoreum, artificial, cns	lb. 9.00	5.00
natural, cns	lb. 7.10	9.00
Catechol, CP, cryst., fib. dms., works	lb. 2.17½	2.17½
resublimed, dms., works	lb. 4.29½	4.29½
Catnip, leaves, southern, bls	lb. .75	.75
Celery seed, French, bgs	lb. .47	.48
Indian, bgs	lb. .19	.15
Cellulose acetate, flake, powd., cns., bgs., 100-lb. lots or more, dlvd. E	lb. NP	.35
acetate-butyrate, powd., 17%	lb. NP	.545
27% butyryl content, bgs., dlvd. E	lb. NP	.595
38% butyryl content, bgs., dlvd. E	lb. NP	.545
50% butyryl content, bgs., dlvd. E	lb. NP	.585
half-second, bgs., dlvd. E.	lb. NP	.545
Cerium hydrate, 74% CeO_2, fib. dms., 50-lb. lots or more	lb. 1.44	1.44
77%, CeO_2, fib. dms., 50-lb. lots or more	lb. 1.74	1.74
Oxalate, NF, bbls., bgs., works,	lb. 1.05	1.05
Oxide, optical grade, bgs., 50-lb. lots or more, works	lb. 1.85	1.85
Chalk (see Calcium carbonate).		



2-50-W

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This Neville Solvent offers you:

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- *Attractive Low Price*

NEVILLE CHEMICAL CO.
P-58 PITTSBURGH 25, PA.

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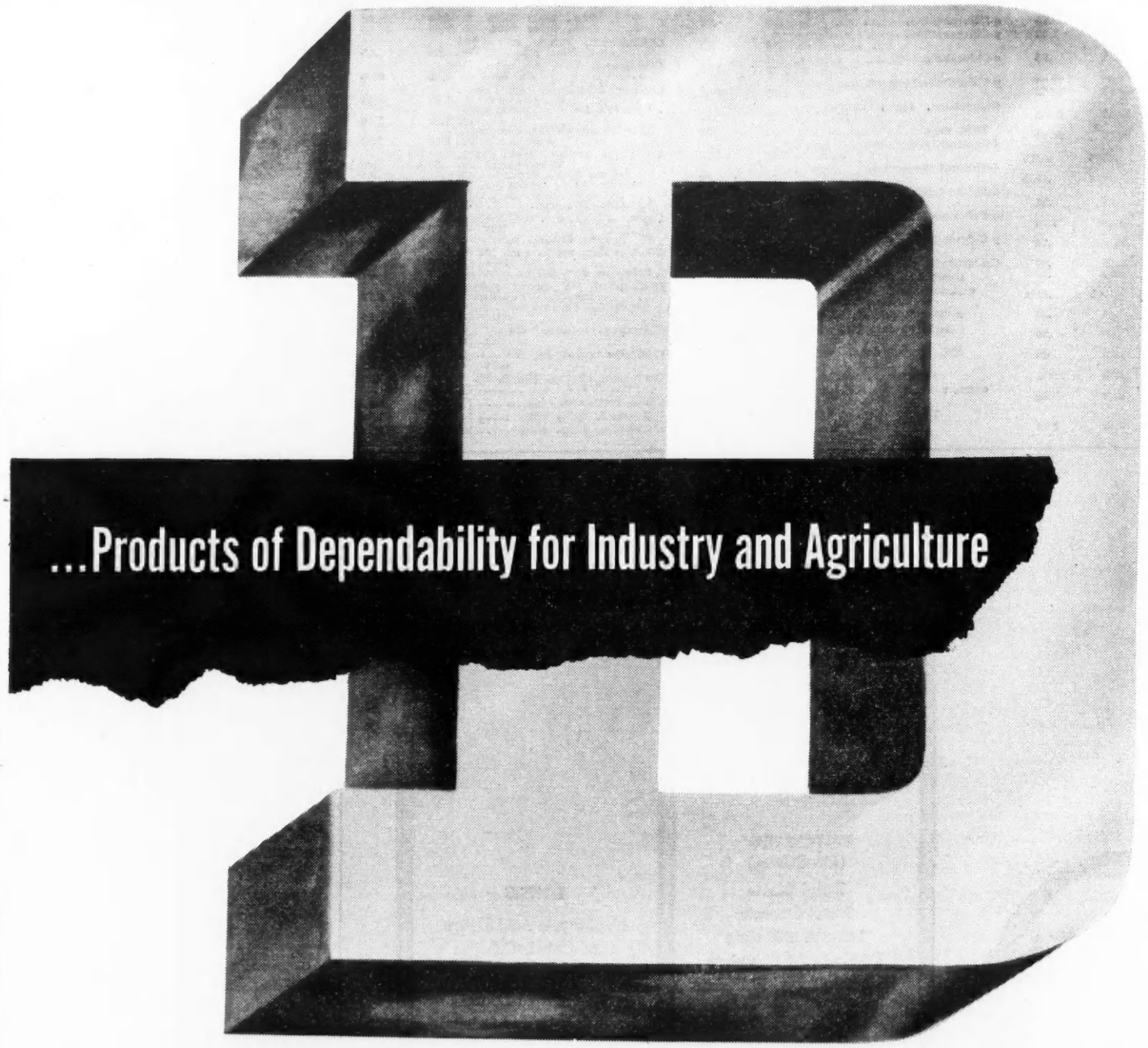
Typical Properties

Specific Gravity	.875
Distillation:	
Initial	158°C.
50%	170°C.
95%	185°C.
End Point (Dry)	191°C.
Flash Point, T.C.C.	105°F.
Color, Saybolt	+26
Acid Wash Color	8
Corrosion	Free from Corrosive Compounds
Kauri-Butanol Value	90
Aniline Point (Mixed)	24°C.



- **PETROLEUM CATALYSTS**—M-S*—Microspheroidal synthetic silica-alumina petroleum cracking catalysts. DA-1*—Ground synthetic silica-alumina petroleum cracking catalyst. DRC*-12—Platinum reforming catalyst.
- **SPECIALTY CATALYSTS**—Custom made catalysts for alkylation, chlorination, dehydrogenation, esterification, hydrogenation, oxidation, polymerization and other reactions. Supports of aluminas, asbestos, kieselguhr, carbon, pumice, silica gel, etc. Typical active agents include aluminum, bismuth, chromium, cobalt, copper, magnesium, manganese, mercury, molybdenum, nickel, palladium, platinum, silver and vanadium. Catalysts made in granular, pelleted, powdered, spherical and extruded forms.
- **SILICA GEL**—Silica Gel is chemically inert reacting only with strong alkalis and hydrofluoric acid. It is an amorphous, extremely porous form of silica having the appearance of clear, crushed quartz. Silica Gel is odorless, insoluble, and a non-conductor of electricity. It has a high adsorptive capacity for gases and liquids: Davison Silica Gel can be produced in many variations to assure maximum efficiency in your particular application.
- **SILICOFLUORIDES**—Ammonium Silicofluoride $(NH_4)_2SiF_6$. Magnesium Silicofluoride $(MgSiF_6H_2O)$. Zinc Silicofluoride $(ZnSiF_6H_2O)$. Sodium Silicofluoride (Na_2SiF_6). Potassium Silicofluoride (K_2SiF_6).
- **INORGANIC ACIDS**—Hydrofluosilicic Acid (H_2SiF_6) technical grade. Sulphuric Acid (H_2SO_4) commercial grades. Contact acid 60° Bé and 98%. Various grades of Oleum up to 40%.
- **FERTILIZERS AND FERTILIZER MATERIALS**—Granulated Triple Superphosphate 45/46% available P_2O_5. Run-of-Pile Triple Superphosphate 45/46% available P_2O_5. Granulated Superphosphate minimum 20% available P_2O_5. Regular Run-of-Pile Superphosphate approximately 20% available P_2O_5. DAVCO* Granulated Fertilizers, a wide variety of analyses. DAVCO Quality Fertilizer, a complete line of mixed fertilizers.
- **PHOSPHATE ROCK**—Davison-owned and operated rock mines at Bartow, Florida, assure a steady flow of basic raw materials.
- **DEVELOPMENT**—Davison is interested in the development of new products and processes and will work with you in your research.

*T. M. Reg. U. S. Pat. Off.

Progress through Chemistry

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Division of W. R. Grace & Co.

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SAratoga 7-3900

Chamomile Flowers—o-Cresol

	1954	1955
Chamomile flowers, Hungarian and Hungarian style, cs	lb. .70	.75
Roman, bls.	lb. 1.00	1.00
Charcoal, activated, NF, fib. dms., c.l., works	lb. .25	.25
Hardwood, briquettes, bulk, c.l., works	ton.77.00	77.00
granular, bgs., works	ton.77.00	77.00
Pinewood, gran., powd., bags., c.l., works, South	ton.53.50	55.00
lump, bgs., c.l., works, South	ton.50.00	51.50
Chestnut extract, 25% tannin, tanks, works	lb. .0425	.0475
powd., 60% tannin, bgs., extra, c.l., works	lb. .1092	.1032
Chloral, tech., 94% min., tanks, works	lb. .21	.21
Hydrate, USP, 40-lb. jars, 1,000-lb. lots	lb. 1.30	1.30
Chloramine, T, NF, bbls., works	lb .75	.75
Chlordan, agricultural, dms., pails, c.l. frt. alld	lb. .65	.65
refd., dms., c.l., frt. alld	lb. .75	.75
Chlorinated paraffin, 42%, dms., c.l., frt. alld	lb. .15½	.15½
70%, dms., c.l., same basis,	lb. .18	.18
rubber, 5, 10, 20, cps., ctns., c.l., works	lb. .55	.55
125, 1,000 cps., ctns., c.l., works	lb. .60	.60
Chlorine, liquid, cyls., c.l., works, tanks, single units, works, frt. equald	100 lbs. 2.93	2.93
multiple units, 3 cars, works, frt. equald.	100 lbs. 3.80	3.80

	1954	1955
m-Chloroaniline, dms., works	lb. .75	.75
o-Chloroaniline, dms., c.l.	lb. .70	.70
p-Chloroaniline, dms., c.l., works, frt. equald	lb. .75	.75
o-Chlorobenzaldehyde, dms., works	lb. 1.20	1.20
p-Chlorobenzaldehyde, dms., works.	lb. 1.33	1.33
Chloroform, tech., tanks, c.l., dlvd	lb. .17	.17
USP, dms.	lb. .30	.30
4-Chloro-2-aminotoluene, fused, bbls	lb. 1.38	1.45
4-Chloro-2-nitroaniline, powd., dlvd. E	lb. .73	.80
2-Chloro-4-nitroaniline, dms., works	lb. .86	.81
o-Chlorophenol, dms., c.l., frt. equald	lb. .34½	.34½
p-Chlorophenol, dms., c.l., frt. alld	lb. .34½	.34½
Chlorophyll, oil soluble, 4%, not fixed, tins, pails, works	lb. 4.25	4.25
copper fixed, 6½%, tins, pails, works	lb. 4.25	4.25
sodium-copper, dms., pails, aqueous sol., 4%, works.	lb. 3.75	3.75
8%, pails, dms., works.	lb. 4.00	4.00
14%, dms., works	lb. 8.90	8.90
conc., dom., 50%, dms., works. basis 100%	lb.55.00	42.00
75%, dms., works, basis 160%	lb45.00	45.00

	1954	1955
Chlorophyll, conc., 90-100%, dms., works, basis 100%	lb.45.00	45.00
imported, 60%, dms., basis 100%	lb.58.00	58.00
75%, dms., basis 100%	lb.58.00	58.00
90%, dms., basis 100%	lb.58.00	58.00
Chloropicrin, com'l, cyls., 130 lbs., frt. alld	lb. .95	.95
Cholesterol, USP, fib, dms., 100-lb. lots	lb. 6.85	6.85
Choline bitartrate, fib. dms., frt. adjusted	lb. 1.50	1.25
Chloride, fib. dms., same basis,	lb. 1.50	1.50
Dihydrogen citrate, fib. dms., same basis	lb. 1.50	1.50
Chromium acetate, soln., 7½%, bbls., works	lb. .08½	.08½
8½%, bbls., works	lb. .09	.09
Fluoride, bbls., works	lb. .51	.51
Oleate, solid, bbls.	lb. .49	.49
Trioxide, NF, bots.	lb. .62	.62
Cinchona bark, NF, red, broken, bgs	lb. .35	.35
yellow, broken, bgs.	lb. .35	.35
Cinchonidine, cryst., cns., 100 oz. lots	oz. .65	.65
Sulphate, cns., 100 oz. lots	oz. .37	.37
Cinchophen, NF, heavy density dms., frt. adjusted	lb. 3 70	3.70
standard density, dms., same basis	lb. 3.50	3.50
Cinchophen-sodium, dms., frt. adj	lb. 4.50	4.50
Cinnamic aldehyde, NF, cns., dms	lb. 1.00	1.00
Cinnamon, Ceylon, No. 2, bls	lb. .40	.60
"0000," bgs.	lb. .50	.88
Citral, bots., cns.	lb. 3.00	6.05
Citronellal, bots., dms.	lb. 1.50	1.85
Citronellol, bots., dms.	lb. 1.90	2.70

	1954	1955
Civet, artif., bots	lb.13.75	13.75
natural, bots.	oz. 7.75	7.50
Clay, ball, dom., airfloated, bgs., c.l., Tenn	ton.19.50	19.50
crushed, bulk, Tenn	ton.10.00	10.00
purified, bgs., c.l., Tenn.	ton.20.50	20.50
imported, airfloated, bgs., c.l., Atlantic port., long	ton.43.00	42.00
lump, bulk, Atlantic port.	ton.27.00	27.00
China, dom., dry grd., air-float 99%, 325 mesh, bgs., c.l., Georgia, works.	ton.10.00	10.00
300 mesh, bgs., c.l., Georgia, works	ton.13.50	13.50
imp., white, lump, bulk, c.l., ex-dock, Phila., Portland, Me.	gross ton.20.00	20.00
powd., bgs., c.l., ex-dock, net	ton.50.00	50.00
Clove, Madagascar, bls.	lb. .78	.54
Zanzibar, bls	lb. .60	.54
CMC, crude, 93%, low or medium vis., bgs., or fib. dms., 23,000 lbs.	dlvd. E., 100% basis, lb. —	.37
65%, bgs. or fib. dms., c.l.,	dlvd. E., 100% basis, lb. 41	.37
purif., high vis. (see Gum Cellulose), standard, low or medium vis., bgs., 23,000 lbs. or over, works, frt. alld	lb. —	.55

CMC prices W. of the Rockies are 2c. per lb. lower, and are on a works basis.

Coaltar, crude, resale tanks, ex-wise	gal. .154	.154
Cobalt acetate, 23.7% Co, bbls., dlvd	lb. 1.30	1.30
Carbonate, 43% Co, powd., bgs., dlvd	lb. 2.15	2.15
Chloride, 24.2% Co, kgs., dlvd.	lb. 1.20	1.20
Hydrate, 60-61% Co, bbls., dlvd	lb. 2.72	2.72
Linoleate, fused, 8½% Co, dms	lb. .75¾	.75¾
liquid, 6% Co, dms	lb. .61	.61
Metal, 97-99% Co, kgs., ex wise	lb. 2.60	2.60
Naphthenate, liq., 6% Co, dms., frt. alld	lb. .48¼	.48½
Nitrate, 20.1% Co, bbls., dlvd.	lb. 1.00	1.00
Oxide, black, 70-71% Co, kgs.	lb. 1.96	1.96
Phosphate, powd., 32.1% Co, kgs., dlvd	lb. 1.69	1.69
Resinate, fused, 3% Co, dms.	lb. .29¾	.29¾
Sulfate, cryst., 21% Co, kgs., dlvd	lb. .89	.89
monohydrated, 33% Co, dms., dlvd	lb. 1.40	1.40
Cocaine, USP, cns., 100 oz. lots.	oz.15.00	15.00
Hydrochloride, cns., 100-oz. lots.	oz.11.75	11.75
Cocillana bark, bgs.	lb. .45N	.40
Cocoa butter, bgs.	lb. 1.15	.82
Codeine, NF, cns., 100 oz. lots.	oz.13.25	13.25
Hydrochloride, cns., 100 oz. lots.	oz.11.75	11.75
Phosphate, USP, cns., 100 oz. lots	oz.10.25	10.25
Sulphate, USP, cns., 100 oz. lots	oz.10.75	10.75
Cohosh root, black, bls.	lb. .22	.20
blue, bls.	lb. .25	.20
Colchicine, USP, bots., cns	oz.35.00	33.50
Colchicum root, bls.	lb. .45	.45
Seed, bgs.	lb. .80	.80
Collodion, USP, dms.	lb. .32½	.32½
flexible, USP, dms.	lb. .34	.34
Colocynth, pulp, bls.	lb. .25	.25
Colombo root, bls.	lb. .20N	NP
Copaiba balsam, cns., dms	lb. .85	.90
Copper acetate, bbls., c.l., works	lb. .34¼	.40
Carbonate, 55%, bbls., works,	lb. .233	.263
Chloride, anhyd., bbls., works,	lb. .39	.39
cryst., bbls., works	lb. .26¼	.26¼
Cyanide, tech., bbls., 1,000-lb. lots or more	lb. .619	.619
Gluconate, cns., dms.	lb. 3.00	3.00
Hydrate, dms., frt. alld E. Miss	lb. .40¼	.40¼
Metal electrolytic	lb. .29½	.30½
Naphthenate, liquid, 8% Cu, dms., frt. alld	lb. .21½	.23½
Nitrate, tech., cryst., bbls., works	lb. .30½	.33¼
Oleate, solid, 9% Cu, dms., works	lb. .45	.45
Oxide, black, bbls., works	lb. .39	.39
red, USN type I, 97%, bbls., works	lb. NP	.48¼
type II, 90%, bbls., works.	lb. NP	.41
Oxychloride, bgs., frt. alld	lb. .40	.40
Quinolinolate, fib., dms.	lb. 4.25	4.25
Resinate, precip., dms., frt. alld	lb. .27½	.30
Sulfate, cryst., 99%, bgs., c.l., works	100 lbs.10.35	10.35
CP, gran., bbls., works	lb. .1715	.1715
monohydrated, 35%, dms., c.l., dlvd	100 lbs.17.10	17.10
tribasic, dealers, bgs., c.l., works	100 lbs.22.50	22.50
USP, gran., cryst., dms	lb. 2.90	2.90
Undecylenate, dms.	lb. 2.90	2.90
Copperas, (see Ferrous sulfate).		
Copra, Atlantic ports, c.i.f.	ton.220.00	187.50
Pacific ports, c.i.f.	ton.215.00	182.50
Coriander seed, Argentine, bgs.,	lb. .14	NP
Czech, bgs.	lb. .09	NP
Moroccan, bgs.	lb. .07	.10
Roumanian, bgs.	lb. .07	.07
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min	100 lbs. 7.31	7.31
Syrup, 42°, dms., c.l.	100 lbs. 7.32	7.32
Cornsilk, bls.	lb. .12	.12
Corrosive sublimate (see Mercuric chloride).		
Cottonseed meal, 41% protein, sacked, c.l., Memphis	ton.65.00	72.00
Coumarin, NF, cryst., cns	lb. 2.94	3.10
Cramp bark, NF, bls.	lb. .85	.85
Cream of tartar (see Potassium bitartrate).		
Creosote carbonate, NF, bots., cbys	lb. 3.05	3.05
Coaltar, crude, tanks, works, frt. adjusted	gal. .22	.22
solution, 80%, tanks works,	gal. .2068	.2068
refd., tanks, same basis	gal. .2970	.2970
Wood, beechwood, cbys., dms.	lb. 1.60	1.60
Hardwood, bots, cbys	lb. 1.30	1.30
Pinewood, tanks, works,	gal. —	4.27
Cresol, tech., 50% below 204°C, dry above 207°C, wide distillation range, tanks, frt. equald	lb. .12	.12
USP, tanks, same basis	lb. .13	.13
m-Cresol, 95-98%, dms., c.l., works	lb. .73½	.60
o-Cresol, m.p. over 30°C., ret. dms., c.l., frt. equald.	lb. .173	.173
29°C., ret. dms., c.l., same basis	lb. .16	.16
25-29°C., non-ret. dms., tanks, same basis		.153

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MISCELLANEOUS

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Lead Linoleate
Lead Oleate
M.R. (Hard Hydrocarbon)
Monty Wax®
Rubber Compounding Ingredients
Sunolite®
(Anti-Sunchecking Wax)
Witcarbs®
Witco Gelling Agents
Witcotes®
Witcomill
Witcolube

*Trade-mark

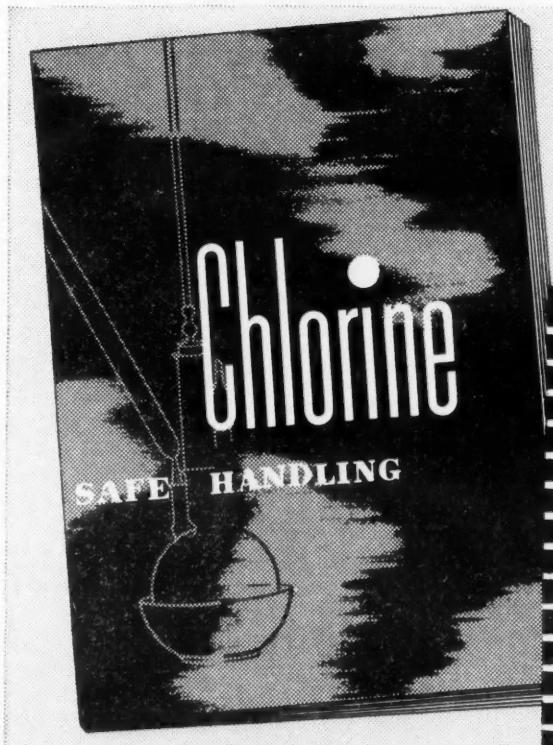
	1954	1953
p-Cresol, 98%, dms., c.l., dlvd.	lb. .49	.49
Methylether, cns.	lb. 2.15	1.90
Crotonaldehyde, 91-93%, l.c.l., works	lb. .24¼	.24¼
Cryolite, nat., indust., bgs., works	lb. .10½	.13
insecticide, dealers, bgs., c.l., dlvd. 100 lbs.	.14	.16¾
Cube root, powd., 5 percent rotenone, bgs., works	lb. .23	.25
Cubeb berries, XX, NF, bgs.	lb. .50	NP
powd., cs.	lb. .58	NP
Cumene tanks, works	lb. .11	.11
Cumin seed, Iranian bgs.	lb. .15N	.13
Moroccan, bgs.	lb. .14	NP
Turkish, bgs.	lb. .14	.11½
Cutch, extract, 55%, tannin, bgs., exdock, duty extra	lb. .08½	.08½
Cyanamide, fertilizer mixing grades, 20.6%, N, gran., bulk, Niagara Falls, Ontario, contracts	ton.55.00	55.00
pulv., 21% N, bgs., works, unit-ton	2.75	2.75
Cyclohexane, tech., tanks, works, gal.	.53	.55
Cyclohexanol, tech., tanks, works, frt. alld. E	lb. .27	.27
Cyclohexanone, tech, tanks, works	lb. .32	.32
Cyclohexylamine, dms., works	lb. .46½	.46½
Cyclopropane, CP, 2-lb. cyls., works	cyl.48.00	48.00
6-oz. cyls., works	cyl.12.00	12.00
USP, hospital, cyls., 200-gal. lots	gal. .36	.36

D

2, 4-D, bbls., c.l., works, frt. equald.	lb. .51	.41½
Isopropyl ester, dms., c.l., works	lb. .53	.43
Dandelion root, bls.	lb. .35	.35
DDD, tech, fine grd., fib, dms., c.l., works	lb. .50	.45
DDT, bgs., c.l., works, frt. equald.	lb. .27	.27
1-Decanol, tech., tanks, dlvd.	lb. .32½	.32½
Deertongue leaves, bls.	lb. .45	.45
Defluorinated, phosphate, 13% P, paper bgs., works	ton.49.50	49.50
14½% P, paper bgs., works,	ton.48.00	48.00
17% P, paper bgs., works,	ton.56.00	56.00
18% P, paper bgs., works,	ton. —	64.35
Degras, common, bbls.	lb. .11	.10
neutral, less 2% ffa., bbls.	lb. .26	.23
over 2% ffa., bbls.	lb. .25	.22
Derris root, 5% rotenone, powd, bbls.	lb. .26	.26N
Desoxyephedrine hydrochloride dextro, bots.	lb.25.00	25.00
dextro-laevo, bots.	lb. 6.50	6.50
Dextrin, corn, gum, paper bgs., c.l. 100 lbs.	8.95	8.95
canary, paper bgs., c.l. 100 lbs.	8.69	8.69
dark, paper bgs., c.l. 100 lbs.	8.79	8.79
white, paper bgs., c.l. 100 lbs.	8.53	8.53
Potato, bgs.	lb. .10½	.10½
Dextrose, USP, dms.	lb. .17¾	.17¾
Diacetyl, flavor grade, bots.	lb. 4.50	4.50
Di-sec-amylphenol, tanks, works,	lb. .28¼	.28¼
Di-tert-butyl-p-cresol, dms., c.l., works	lb. .91	.91
o-Dianisidine, dms.	lb. 2.00	2.00
Dibenzyl sebacate, CP, tanks works	lb. .88	.88
p-Dibromobenzene, bgs., 500-lb. lots	lb. .55	.55
Dibutyl phthalate, tanks, dlvd. E.	lb. .33	.30
Sebacate, tanks, works	lb. .75	.66
Tartrate, dms., works, frt. alld	lb. .64	.64
Dibutylamine, tanks, frt. alld. E. of Rockies	lb. .53	.53
Dicapryl phthalate, tanks, frt. alld. E. of Rockies	lb. .32	29½
Sebacate, tanks, works	lb. .66½	.61
2,5-Dichloroaniline, dms., works,	lb. .75	.75
o-Dichlorobenzene, tanks, works, frt. alld. E. of Rockies	lb. .10¾	.10¾
p-Dichlorobenzene, dms., c.l., works	lb. .14½	.16½
Dichlorodiphenyldichoroethane (see DDD).		
Dichloropentanes, tanks, works,	lb. .04¼	.04¼
Dicyclohexylamine, tanks, works,	lb. .49¾	.49¾
Dicyclohexyl phthalate, fib. dms., c.l., works	lb. .60	.60
Dieldrin, dms., frt. alld	lb. 1.80	1.80
Diethanolamine, tanks, dlvd., E.	lb. .27½	.24½
Diethyl carbonate, tanks, frt. alld	lb. .45	.45
Maleate, tanks, dlvd.	lb. .48½	.48½
Oxalate, tanks, dlvd.	lb. .40	.40
Phthalate, tanks, dlvd.	lb. .25	.25
Sulfate, tanks, works	lb. .17	.17
Diethylamine, tanks, dlvd. E	lb. .48½	.48½
N, N-Diethylaniline, dms	lb. .50	.50
Diethylene glycol, tanks, dlvd E.	lb. .15½	.14¾
Boriborate, dms., l.c.l.	lb. .30½	.30½
Diethyl ether, dms., l.c.l., works	lb. .46½	.46½
Monobutyl ether, tanks, dlvd.	lb. .27	.27
acetate, dms., c.l., works	lb. .30	.30
Monoethyl ether, tanks, dlvd.	lb. .19½	.19½
acetate, dms., c.l., dlvd	lb. .25¼	.25¼
Monomethyl ether, tanks, works,	lb. .18½	.18½
Diethylenetriamine, tanks, dlvd E	lb. .41½	.41½
Diethylethanolamine, tanks, dlvd.	lb. .65½	.65½
Diethylstilbestrol, USP, bots., 10 kilo lots	kilo.110.00	100.00
Digitalis leaves, USP, dom., bbls.	lb. .90	.90
Digitoxin, USP, bots.	gram 5.50	5.00
Digylcol laurate, dms.	lb. .31½	.35
Oleate, dms.	lb. .28½	.31
Stearate, dms.	lb. .25	.26
Dihexyl sebacate, tanks, works,	lb. .68	.62
Dihydrazine sulfate, dms., works,	lb. 1.10	1.10
Dihydrostreptomycin, either hydrochloride or sulfate, bulk,	gram. .17	.17
Dihydroxydichlorodiphenylmethane, tech., dms	lb. 1.15	1.15
Di-isobutyl ketone, tanks, works,	lb. .13½	.13½
Phthalate, tanks, dlvd. E	lb. .32	.29
Di-isobutylene, tanks, works	lb. .07½	.08
Di-iso-octyl phthalate, tanks, dlvd.	lb. .34	.30½
Sebacate, tanks, works	lb. .69	.61
Di-isopropylamine, tanks, dlvd. E. of Rockies	lb. .48	.48
Dillseed, dewhiskered, bgs	lb. .16	.13
nat., bgs.	lb. .14	.12
Dimethyl anthranilate, cns.	lb. 5.25	5.25
Chloroacetal, tanks, works	lb. .51	.40
Dimethyl ethanolamines, anhyd., tanks, dlvd.	lb. 1.40	1.40
70%, tanks, dlvd.	lb. .53	.66
Hydroquinone, dms.	lb. 1.70	1.70
Phthalate, tanks, dlvd.	lb. .27½	.27½
Sebacate, tanks, works	lb. 1.25	1.25
Sulfate, 55 gal. ret. dms., c.l., works	lb. .15	.15
Dimethylamine, 25%, 40% soln., tanks, works, basis 100%	lb. .33	.33
N,N-Dimethylaniline, tanks, frt. alld	lb. .28½	.28½
N,N-Dimethylformamide, tanks,	lb. .33	.33
2,4-Dinitroaniline, dms., frt. equald	lb. .57	.57
m-Dinitrobenzene, 85°C., dms.	lb. .20	.20
89°C., dms.	lb. .22	.22
2,4-Dinitrochlorobenzene, tanks, frt. alld. E	lb. .15	.15
2,4-Dinitrophenol, bbls.	lb. .34	.37
2,4-Dinitrotoluene, oily, dms.	lb. .10	.10
refd., 68°C., dms.	lb. .21	.21
Dioctyl adipate, tanks, works	lb. .44¾	.42½
Phthalate, tanks, frt. alld	lb. .34	.33½
Sebacate, tanks, works	lb. .69	.61
Di-o-tolylguanidine, dms., ton lots, dlvd	lb. .57	.57
Dioxane, tanks, works	lb. .27	.27
Dipentaerythritol, bgs., l.c.l., works	lb. .37	.33
Dipentene, dest-dist., dms., extra, c.l., works	gal. .49	.49
steam dist., dms., c.l., works, South	gal. .60	.60
Diphenyl, bbls., c.l., works	lb. .15	.15
Oxide perfume grade, cns.	lb. .54	.54
Phthalate, dms., c.l., works	lb. .51¾	.51¾
Diphenylguanidine, dms., ton lots,	lb. .48	.48
Diphenylhydantoin-sodium, USP, dms.	lb. 5.30	5.30

p-Cresol—Dyes, Coaltar, for Drugs & Cosmetics

	1954	1953
Dipropylene glycol, tanks, frt. alld	lb. .15	.14¾
Methylether, tanks, dlvd. E.	lb. .19¼	.18½
Divi-divi, 45% tannin, bgs., bls., c.l., U.S. ports, ex dock	ton.70.00N	70.00
Divinylbenzene, 20-25%, tanks, works	lb. .19	.19
40-50%, dms., c.l., 100% basis, works	lb. 1.00	1.00
Dodecylbenzene, tanks, frt. equald	lb. .12½	.12½
Dyes, coaltar, certified colors for food, drugs and cosmetics, 5-lb. and 1-lb. lots, dlvd:—		
Blue, FD&C, No. 1, cns.	lb.17.00	17.00
No. 2, cns.	lb.17.00	17.00
Green, FD&C, No. 1, cns.	lb.17.00	17.00
No. 2, cns.	lb.22.20	22.20
No. 3, cns.	lb.35.25	35.25
Orange, FD&C, No. 1, cns.	lb. 3.65	3.65
No. 2, cns.	lb. 4.65	4.65
Red, FD&C, No. 1, cns.	lb. 7.55	7.55
No. 2, cns.	lb. 4.00	4.00
No. 3, cns.	lb.22.20	22.20
No. 4, cns.	lb. 7.20	7.20
No. 32, cns.	lb. 5.30	5.30
Violet, FD&C, No. 1, cns.	lb.17.00	17.00
Yellow, FD&C, No. 1, cns.	lb.10.50	10.50
No. 3, cns.	lb. 3.30	3.30
No. 4, cns.	lb. 3.30	3.30
No. 5, cns.	lb. 4.00	4.00
No. 6, cns.	lb. 4.00	4.00
Dyes, coaltar, certified colors for drugs and cosmetics, 1-lb. lots, works, 25-50-lb. lots, dlvd:—		
Black, D&C, No. 1, cns.	lb.10.95	10.95
Brown, D&C, No. 1, cns.	lb.16.10	16.10
Dyes, coaltar, certified colors for drugs and cosmetics, 1-lb. lots, works, 25-50-lb. lots, dlvd:—		
Green, D&C, No. 5, cns.	lb.16.10	16.10
No. 6, cns.	lb.16.10	16.10
No. 7, cns.	lb.14.80	14.80
Orange, D&C, No. 3, cns.	lb.10.95	10.95
No. 4, cns.	lb.20.50	20.95
No. 5, cns.	lb. 5.70	5.70
No. 10, cns.	lb.20.70	20.70
Red, D&C, No. 8, cns.	lb. 2.85	2.85
No. 9, cns.	lb. 2.85	2.85
No. 10, cns.	lb. 2.30	2.30
No. 11, cns.	lb. 1.85	1.85
No. 12, cns.	lb. 2.65	2.65
No. 17, cns.	lb.10.95	10.95
No. 18, cns.	lb.24.00	24.00
No. 19, cns.	lb.15.45	15.45
No. 21, cns.	lb. 3.60	3.60
No. 22, cns.	lb.10.95	10.95
No. 28, cns.	lb.24.65	24.65
No. 33, cns.	lb.17.45	17.45
Violet, D&C, No. 2, cns.	lb.16.10	16.10
Yellow, D&C, No. 7, cns.	lb.10.95	10.95
No. 10, cns.	lb.13.50	13.50
No. 11, cns.	lb.13.50	13.50
Dyes, coaltar, certified colors for drugs and cosmetics, external use, in 1-lb. lots, works, 25-50-lb. lots, dlvd:—		
Blue, Ext. D&C, No. 1, cns.	lb.16.10	16.10
Green, Ext. D&C, No. 1, cns.	lb.16.10	16.10
Red, Ext. D&C, No. 1, cns	lb.13.50	13.50
Yellow, Ext. D&C, No. 1, cns	lb.10.95	10.95



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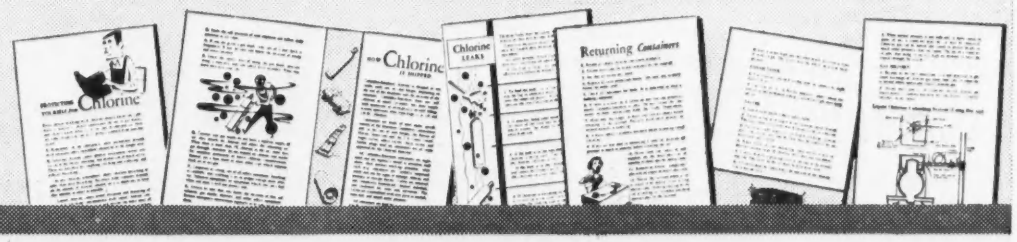

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Dyes, Coaltar, for General Use—Ferric Phosphate

		1954	1955
Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype) contract, dlvd:—			
20	Chrysoidine Y	lb. .74	.74
27	Fast light Orange 2G	lb. .90	.90
31	Phloxine, 2G	lb. .74	.74
36	Yellow, 2G	lb. .83	.83
40	Orange R extra, conc	lb. 1.06	1.06
57	Fuchsine 6B	lb. 1.08	1.08
79	Scarlet, 2R	lb. .81	.81
151	Orange, AD	lb. .55	.55
161	Orange, RR	lb. .66	.66
176	Fast red, A	lb. .99	.99
179	Rubine XX, conc	lb. 1.14	1.14
180	Blue, F4B	lb. .92	.92
185	Brilliant Scarlet 3RN, conc	lb. .93	.93
202	Chrome blue black, conc.	lb. .75	.75
203	Chrome black T	lb. .78	.78
208	Fast blue, SR	lb. .91	.91
216	Chrome red, B	lb. .84	.84
234	Brown Y	lb. .98	.98
246	Blue black, extra conc.	lb. .95	.95
275	Milling red, 3R, conc.	lb. 2.03	2.03
289	Navy blue, 3R, conc.	lb. 1.19	1.19
299	Black F, conc.	lb. 1.54	1.54
304	Neutral black 2B, conc., 200%	lb. 2.01	2.01
326	Fast scarlet, 4BNC	lb. 1.64	1.64
332	Bismarck brown, RX, conc	lb. .95	.95
365	Brilliant yellow, conc	lb. 2.57	2.57
332	Scarlet, B	lb. 1.82	1.82
401	Diazo black, BHD	lb. .69	.69
466	Blue, 2B, extra, conc	lb. 1.07	1.07
419	Red FC conc	lb. 1.12	1.12
420	Brown M	lb. .98	.98
448	Red, 4BX, conc	lb. 1.30	1.30
518	Diamine sky, blue FF, extra, conc	lb. 1.50	.94
561	Brown, B	lb. 2.03	2.03
581	Direct black, EB	lb. .94	.94
593	Green BY, conc	lb. .72	.72
620	Yellow 2G	lb. 1.01	1.79
640	Yellow XX	lb. 1.61	1.61
655	Yellow OX	lb. 2.04	2.04
657	Green V	lb. 2.10	2.10
662	Brilliant green, G	lb. 1.79	1.79
667	Brilliant milling green 6B, conc	lb. 3.68	3.68
671	Blue, EG	lb. 1.70	1.70
681	Crystal violet powder	lb. 2.15	2.15
698	Violet 4BXN	lb. 1.74	1.74
720	Brilliant blue, BBG	lb. 1.88	1.88
729	Blue B conc	lb. 2.79	2.79
814	Yellow, NN, conc	lb. 3.11	3.11
841	Safranine GF extra, conc.	lb. 3.17	3.17
865	Nigrosine WSJ	lb. .75	.75
922	Blue, GXX	lb. 1.71	1.71
978	Black, GXCF, conc	lb. .32	.32
1034	Alizarine, red, SC	lb. 2.59	2.59
1054	Alizarine, blue, SAPX	lb. 2.91	2.91
1078	Alizarine, green, CG, extra	lb. 2.72	2.72
1085	Alizarine, blue-black B,	lb. 2.33	2.33
1096	Golden orange, GFD, single, paste	lb. 1.99	1.99
1099	Dark blue BO, single paste	lb. 1.75	1.75
1101	Jade green, N, double paste	lb. 1.98	1.98
1106	Blue RS, double paste,	lb. 2.96	2.96
1113	Blue BLFD, double paste,	lb. 2.25	2.25
1150	Olive R, single paste	lb. 1.10	1.10
1151	Brown R, single paste,	lb. 1.76	1.76
1171	Indigo, syn., 20% paste	lb. .31	.31
1217	Orange RD, single paste,	lb. 1.65	1.65
P-4	Brown, PG	lb. 2.30	2.30
P-14	Brown, EB	lb. 1.51	1.51
P-80	Diazo brilliant scarlet ROAD	lb. 2.79	2.79
P-202	Diazo black VJ, conc.	lb. 1.74	1.74
P-244	Brilliant scarlet, BN,	lb. 1.31	1.31
P-313	Naphthol SWF	lb. 2.42	2.42
Dyes, coaltar, for stains, oil-soluble, 100-lb. dms., sellers works.			
	Black, blue No. 550	lb. .81	.81
	Jet, No. 551	lb. .89	.89
	Brown, R, conc	lb. 1.72	1.72
	Orange R, brilliant	lb. .90	.90
	Red, 4B, conc	lb. 1.37	1.37
	Yellow, C	lb. 1.18	1.18
	FN, conc.	lb. 1.22	1.22
Dyes, coaltar, for stains, spirit-soluble, 100-lb. dms., sellers' works—			
	Auramine, O	lb. 1.85	1.85
	Black, basic, blue	lb. 1.21	1.21
	Jet	lb. 1.21	1.21
	Blue, methylene, 2B, conc.	lb. 1.71	1.71
	Brown, Bismarck R, conc.	lb. .86	.86
	Chrysoidine, R, extra	lb. .60	.60
	Y, extra	lb. .64	.64
	Fuchsine, conc	lb. 3.08	3.08
	Green, malachite, conc	lb. 2.10	2.10
	Rhodamine, B	lb. 4.33	4.33
	Safranine, Y, conc	lb. 2.90	2.90
	Violet, methyl B	lb. 1.10	1.10
Dyes, coaltar, for stains, water-soluble, 100-lb. dms., sellers' works—			
	Azo rubine R, extra, conc.	lb. 1.04	1.04
	Black, acid blue, B, extra	lb. .86	.86
	Fast light, 3G, extra	lb. 2.04	2.04
	Methanil, conc	lb. .91	.91
	Orange, acid, Y, conc	lb. .47	.47
	Scarlet, croceine, MOO	lb. 1.45	1.45
	Yellow, azo-, conc	lb. .90	.90

Oil-soluble, spirit-soluble, water-soluble dyes in kegs, 3c. higher; tins, 10c. higher.

E

		1954	1955
Echinacea root, bls	lb.	1.25	1.10
Egg yolk, dried dom., bbls	lb.	1.48	1.02
tanners, bbls	lb.	.06½	.06
Elder flowers, bright, bls	lb.	.35	.35
Elm bark, grinding, bls	lb.	NP	.30
powd., bbls., bxs	lb.	.60	.45
select, bndls	lb.	.65	.65
Emetine hydrochloride, USP, bots	oz.	32.95	32.95
Ephedrine, synthetic, USP, anhyd., bots., 100-oz. lots.	oz.	.98	.98
hydrous, bots., 100-oz. lots.	oz.	.92	.92
Hydrochloride, tin, 100 ozs.	oz.	.75	.75
Sulphate, cryst., tins, 100 ozs.	oz.	.72	.72
powd., tin, 100 ozs.	oz.	.73	.73
Epichlorhydrin tanks, works	lb.	.37	.37
bots	oz.	29.75	35.75
Epinephrine, syn., USP, bots., 100 grams	gram.	.45	.45
Epsom salt, (See Magnesium Sulphate), works 100 lbs.		2.15	2.15
Ergosterol, unirradiated, cryst.	kilo.	150.00	150.00
Ergot, NF, dms., tin-lined	lb.	3.50	3.00
Eserine salicylate, USP, bots	oz.	29.75	35.75
Sulfate, bots	oz.	34.50	39.50
Ether (See specific product).			
Ethyl acetate, natural, fermentation, 85-88%, tanks, frt. alld	lb.	.11	.11
95-98%, tanks, frt. alld.	lb.	.11¼	.11¼
99%, tanks, frt. alld	lb.	.11½	.11½
synthetic, 85-90%, tanks, frt. all	lb.	.11	.11
95-98%, tanks, frt. alld	lb.	.11¼	.11¼
99%, tanks, frt. alld	lb.	.11½	.11½
Acetoacetate, dms., c.l., dlvd.	lb.	.55	.55
Acrylate, tanks, works	lb.	.42¾	.42¾
Bromide, tech., 98%, dms	lb.	.43	.43
Butyrate, works	lb.	.80	.80
Butyl ketone, tanks	lb.	.34	.34
Cellulose, vis. 7 cps., bgs., 5,000 lb. lots or more, works	lb.	.70	.70
vis. 10, 20, 50, 100, 150, cps., bgs., 3,000 lb. lots or more, works	lb.	.65	.65
Chloride, tech., tanks, works.	lb.	.10	.10
USP, bbls., cyls	lb.	.22	.22
Cinnamate, cns.	lb.	2.71	2.71
Ether, absolute, ACS, dms.	lb.	.37	.27
anesthesia, USP, hospitals, 1-lb. cans	lb.	.89	.89
indust., tanks, dlvd. E	lb.	.10	.10
Ethanolamines, mixed, tanks, frt. alld. E. Miss	lb.	.40	.40½
Gallate, dms., 100 to 2,000-lb. lots	lb.	3.90	3.90
Iodide, bots., works	lb.	3.30	3.30
Methacrylate, dms., c.l., and truckloads, works	lb.	.50½	.51½
Morphine, hydrochloride, USP, bots	oz.	11.85	11.85
Oenanthate, dms.	lb.	1.00	1.00
Silicate, 40% available SiO_2, dms., works	lb.	.54½	.53½
N-Ethyl-a-naphthylamine, dms., works	lb.	1.02	1.02
N-Ethyl-o-toluidine, bbls	lb.	.88	.88
N-ethylaniline, tanks, frt. alld.	lb.	.50	.50
Ethylbenzene, 99%, tanks	lb.	.18½	.18½
Ethylene dichloride, tanks, dlvd E	lb.	.09	.09
Glycol, tanks, frt. alld. E	lb.	.14½	.13
Monobutylether, tanks, dlvd.	lb.	.18½	.18½
Monoethylether, tanks, works.	lb.	18½	.18½
acetate, tanks, dlvd	lb.	.16½	.16½
Monomethylether, tanks, works	lb.	.18½	.18½
acetate, tanks, works	lb.	.27	.27
Monostearate, triple pressed dms	lb.	.31	.34
Oxide, tanks, dlvd. E	lb.	.16¼	.15
Ethylenediamine, 76% tanks, works	lb.	.44	.44
Ethylvanillin, cns., 25-lb. lots	lb.	6.75	—
Eucalyptol, USP, cns., dms	lb.	1.40	1.40
Eugenol, pure, USP, bots	lb.	2.35	2.70
Euphorbia herb, bls	lb.	.13	.15

F

		1954	1955
Feldspar, 140-200 mesh, bulk, c.l., works	ton.	NP	19.50
Fennel seed, Czech, medium, bgs.	lb.	.11	.11½
Fenugreek seed, Moroccan, bgs.	lb.	.07	.07½
Ferric acetate, liquor, 28°, bbls., c.l., works	lb.	.09	.09
soln., USP IX, cbys	lb.	.16	.16
Cacodylate, NF, bots	lb.	13.00	13.00
Chloride, anhyd., tech., dms., cl., works 100 lbs.		6.75	6.75
indust., cryst., bbls., c.l., works. 100 lbs.		4.75	4.75
42° Be, cbys., c.l., works. 100 lbs.		7.25	7.25
tanks, frt. equald., 100% basis 100 lbs.		3.25	3.25
USP cryst., dms., works	lb.	.07½	.07½
Citrate, gran., dms	lb.	.86	.86
Glycerophosphate, NF, powd.	lb.	4.85	4.75
Hypophosphite, NF, dms	lb.	3.45	3.45
Naphthenate liq., 6% Fe, dms., frt. alld	lb.	.25¾	.25¾
Oxalate, gran., dms	lb.	.87	.85
Phosphate, NF, soluble, gran., pearls, cs.	lb.	.64	.64

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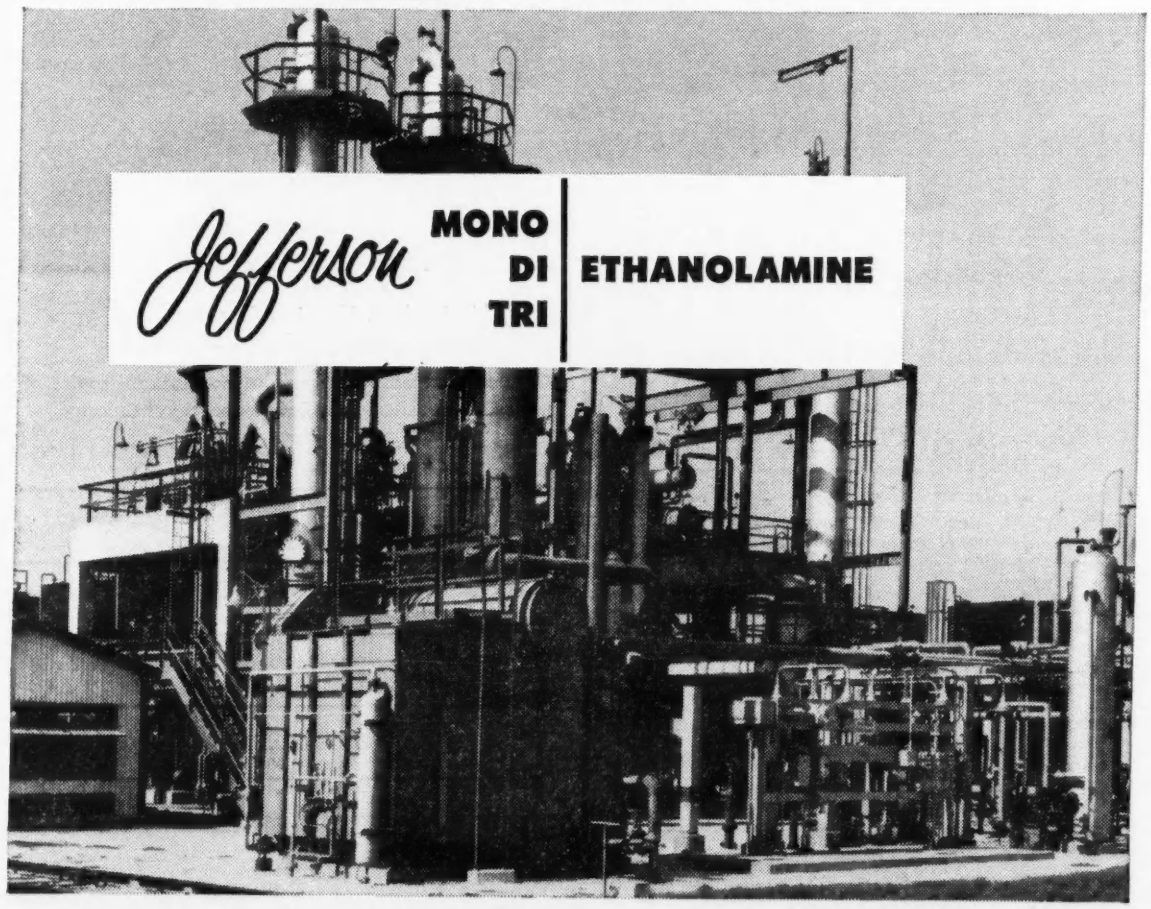

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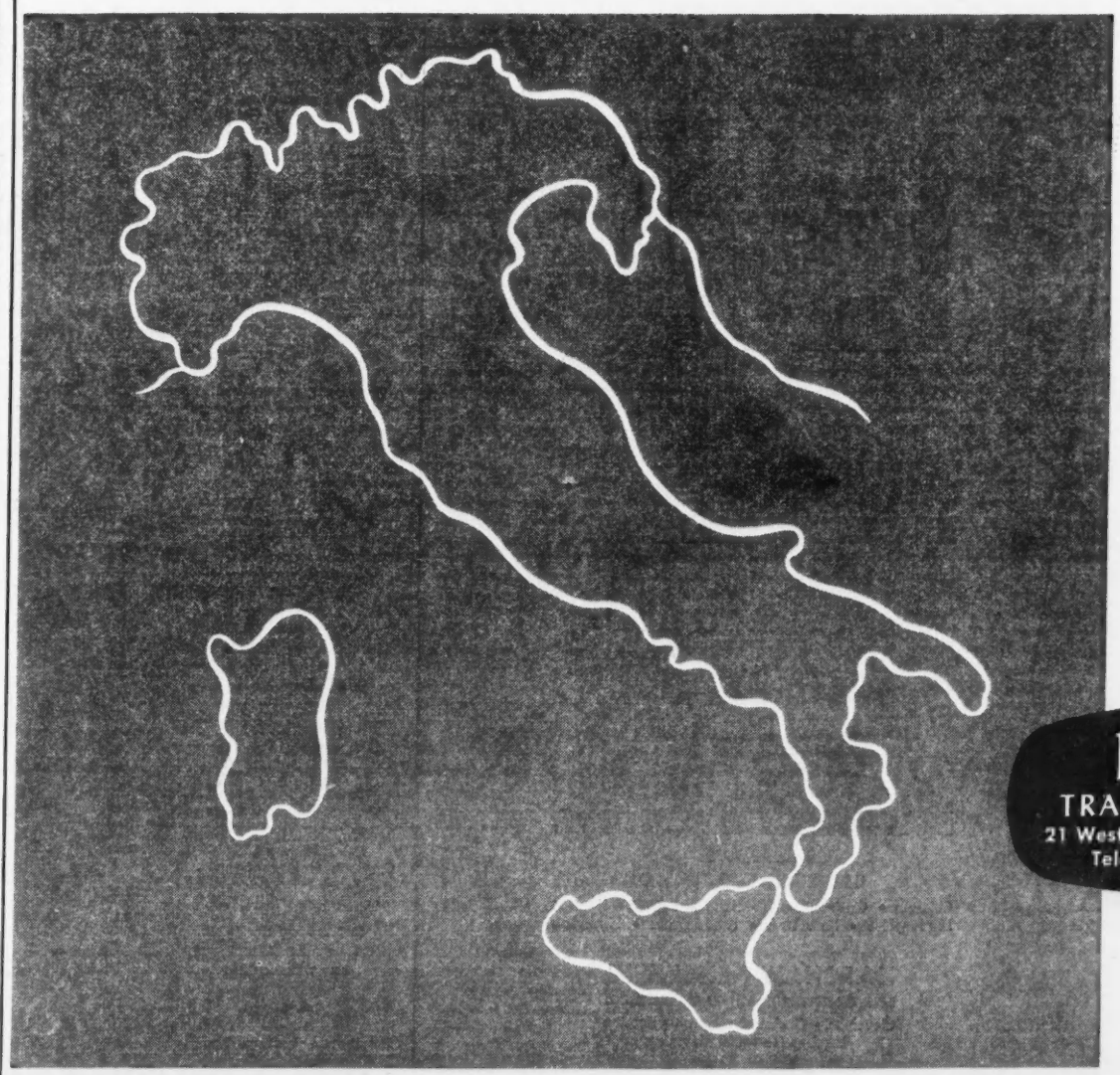

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Ferric Pyrophosphate—Helonias Root

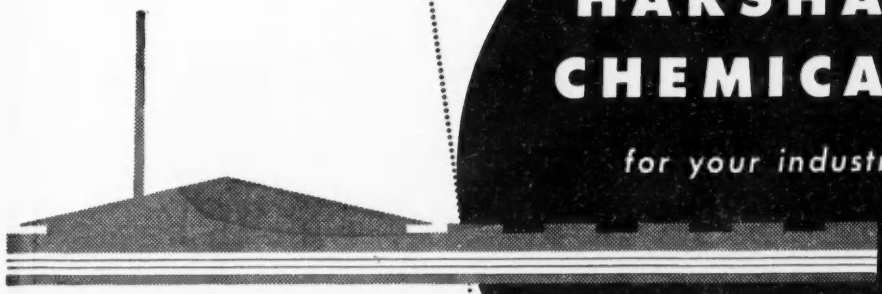
		1954	1955
Ferric pyrophosphate, NF, VII, soluble, gran., pearls, dms.	lb.	.78	.78
Resinate, 6¾% Fe, dms., frt. alld.	lb.	.26¼	.29
Stearate, dms., c.l., frt. alld.	lb.	.37	.37
Sulfate, partially hydated, bgs., c.l., works	ton.	31.75	31.75
Ferric-ammonium citrate, brown, NF, gran., dms	lb.	.59	.59
green, USP XII, gran., dms.	lb.	.59	.59
Oxalate, fine gran., dms	lb.	.25½	.25½
Ferric-potassium, oxalate, fine gran., dms	lb.	.30½	.30½
Ferric-sodium, oxalate, fine gran., dms	lb.	.25½	.25½
Ferrous gluconate, NF, dms	lb.	.88	.88
Fir balsam, Canada, cns	gal.	34.00	34.00
Oregon, bbls.	gal.	NP	3.00
Fishmeal, ground, domestic, 60% protein, bulk, Balto area	ton.	134.00	145.00
Fishscrap, dried, 60% protein, bulk, Balto. area	ton.	129.00	140.00
Formaldehyde, NF, 37%, (inhibited), Zone 1, tanks, works	lb.	.0420	.033
methanol - free, (uninhibited), Zone 1, tanks, works	lb.	.0395	.03
Fringetree bark, bls	lb.	.60	.60
Fuller's earth, bgs., c.l., Ill. mines	ton.	NP	19.00
powd., insecticide grade, dried, bgs., c.l., Ga. or Fla. mines	ton.	NP	19.00
calcined, bgs., c.l., same basis	ton.	NP	20.00
Fuller's earth, powd., oil-bleaching grade, 100-mesh, bgs., c.l., same basis	ton.	NP	16.50
200-mesh, bgs., c.l., same basis	ton.	NP	17.50
spent, bgs., c.l., shipt. point,	ton.	4.50	4.50
Furfural, tech., tanks, works,	lb.	.11½	.12
Fusel oil, refd., tanks, dlvd	lb.	.15	.15
Fustic extract, cryst., No. 1, bbls., l.c.l	lb.	.47½	.47½
No. 2, bbls., l.c.l.	lb.	.45½	.45½
No. 3, bbls., l.c.l.	lb.	.43½	.43½
liq., No. 1, bbls., l.c.l.	lb.	.22½	.22½
No. 2, bbls., l.c.l	lb.	.21½	.21½
No. 3, bbls., l.c.l	lb.	19	.19
solid, No. 1, bxs., l.c.l	lb.	.45	.45

G

G salt, bbls., frt. alld., basis 100%	lb.	.73	.73
Gammapicoline, (see g-Picoline).			
Gelatin, edible, pure (pork skin), 75 Bloom test, fib. dms., c.l	lb.	.52	.53
150 Bloom test, fib. dms., c.l	lb.	.63	.64
200 Bloom test, fib. dms., c.l	lb.	.69	.71
225 Bloom test, fib. dms., c.l	lb.	.72	.74
275 Bloom test, fib. dms., c.l	lb.	.79	.81
Gelsemium root, bls.	lb.	.28	.23
Gentian root, bls.	lb.	.17	.17
grd., bbls., bxs.	lb.	.22	.22
powd., bbls., bxs.	lb.	.23	.23
Geraniol, extra, ens., dms	lb.	1.40	1.90
standard, cns., dms.	lb.	.80	.60
Geranyl acetate, cns.	lb.	1.40	1.45
Ginger oleoresin, NF, from African root, bots	lb.	4.00	4.00
from Jamaican root, bbls	lb.	5.00	6.00
Root, African, bls.	lb.	.15	.31
Jamaica, No. 1, bgs	lb.	.19	NP
No. 2, bgs.	lb.	.17	.36
No. 3, bgs.	lb.	.16	.35
Nigerian, split, bgs.	lb.	.14½	.29
Glaubers salt, anhyd. (see Sodium sulfate).			
Glue, bone, extracted 86 jellygrams, bgs., c.l., dlvd	lb.	.23	.17
104 jellygrams, same basis.	lb.	.23½	.19
131 jellygrams, same basis.	lb.	.24	.21
164 jellygrams, same basis.	lb.	.24½	.23
191 jellygrams, same basis.	lb.	.25	.25
222 jellygrams, same basis.	lb.	.26	.26
packers' 40 jellygrams, bgs., c.l., dlvd	lb.	.18½	.15½
65 jellygrams, same basis.	lb.	.19½	.16½
86 jellygrams, same basis.	lb.	.20	.17
115 jellygrams, same basis.	lb.	.20½	.17½
135 jellygrams, same basis.	lb.	.21½	.18½
164 jellygrams, same basis.	lb.	.22	.19½
renderers, 110 jellygrams, bgs., c.l., dlvd	lb.	.20	.15
Bone glue, l.c.l. prices, 1c. higher than c.l.			
Glue, hide, 70-84 (jellygrams), bgs., c.l., dlvd	lb.	.22	.18
95-121, bgs., c.l., dlvd	lb.	.22½	.20
122-149, bgs., c.l., dlvd	lb.	.24	.22
150-177, bgs., c.l., dlvd	lb.	.26	.24
178-206, bgs., c.l., dlvd	lb.	.28	.26
207-236, bgs., c.l., dlvd	lb.	.32	.28
237-266, bgs., c.l., dlvd	lb.	.33½	.30
267-296, bgs., c.l., dlvd	lb.	.33½	.32
299-330, bgs., c.l., dlvd	lb.	.35	.34
331-362, bgs., c.l., dlvd	lb.	.36	.36
363-394, bgs., c.l., dlvd	lb.	.37	.37
395-427, bgs., c.l., dlvd	lb.	.38	.38
428-460, bgs., c.l., dlvd	lb	.40	.39
461-494, bgs., c.l. dlvd	lb.	.42	.40
495-529, bgs, c.l., dlvd	lb.	.44	.41
Glycerine, nat., crude, saponification, 88%, to refiners, tanks dlvd	lb.	.20	.23
soaplye, 80%, tanks, dlvd.	lb.	.18	.21
dynamite, tanks, dlvd	lb.	.34	.30
high gravity, tanks, dlvd	lb.	.34	.30
refd., BP, 98%, tanks, dlvd.	lb.	.34	.30
USP, CP, 95%, tanks, dlvd.	lb.	.33	.29
yellow, dist., dms., c.l., dlvd.	lb.	.34	.30
Glyoxal, 30%, tanks, works	lb.	.18	.18
Gold chloride, acid brown, bots.,	oz.	22.50	22.50
acid yellow, bots	oz.	20.00	20.00
Goldenseal root, NF, tested, bls.	lb.	2.25	2.25
powd., bxs.	lb.	2.75	2.75
Graphite, amorph., powd., bgs., fib. dms., ex whse	lb.	.06	.06
crystalline, 88-90%, powd., bgs., fib. dms., ex whse.	lb.	.19	.19
90-92%, powd., bgs., fib. dms., ex whse	lb.	.21	.21
95-97%, powd., bgs., fib. dms., ex whse	lb.	.29	.29
flake, No. 1, 90-95%, bgs., fib. dms., ex whse	lb.	.29	.29
No. 2, 90-95%, bgs., fib. dms., ex whse	lb.	.29	.29
Grease, brown, dlvd	lb.	.05⅝	.06¾
house, loose	lb.	.06	.07½
white, choice	lb.	.09½N	.08
yellow, loose	lb.	.06⅝	.07¾
Green, brilliant, thioflavin, toner, molybdated, PMA, kgs., works	lb.	5.10	5.10
tungstated, PTMA, kgs., works	lb.	6.20	6.00
Chrome, CP, dark, light, medium, blue content up to 5 to 30%, bbls., dlvd., N. of Tenn. and N. C., E. of Miss., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis	lb.	.38	.38
16-30%, bbls., same basis.	lb.	.39	.39
31-45%, bbls., same basis.	lb.	.40	.40
45-49%, bbls., same basis.	lb.	.43	.43
50%, bbls., same basis	lb.	.45	.48
reduced color, 25%, bbls., same basis	lb.	.19	.19
Chromium oxide, hydrated, bbls., dms., c.l., frt. alld.	lb.	1.00	1.00
pure, c.l., bgs., frt. alld	lb.	.39¼	.39¼
Malachite, straight, PTMA, bbls., works	lb.	4.80	4.60
Phthalocyanine toner, bbls., works	lb.	3.95	3.95
resinated, bbls.	lb.	3.50	3.50
water dispersable	lb.	1.71	1.71
Pigment B, kgs.	lb.	1.35	1.35
Grindelia robusta herb, bls	lb.	.44	.38
Guaiacol, cryst., tins	lb.	2.10	2.10
Liquid, NF, bots., cbys	lb.	2.30	2.30
Carbonate, dms	lb.	3.40	3.40
Gum, Arabic, amber, sorts, bgs.	lb.	.15½	.20
powd., USP, bbls.	lb.	.20	.26
Benzoin, Sumatra, cs	lb.	.38	.38
Cellulose, high vis., bgs., 23,000 lbs. or more, works, frt. alld	lb.	.60	.55
Copal, Congo, No. 1, bgs	lb.	.19	.21
No. 2 bgs	lb.	.16	.18½
No. 3, bgs	lb.	.14½	.16½
Manila C, bgs	lb.	.34	.42
CBB, bgs	lb.	.22½	.35
DBB, bgs	lb.	.20	.29
DK, bgs	lb.	.14	.22
dust, bgs	lb.	.11	.12
MA, soft, bgs	lb.	.14½	.21½
WS, bgs	lb.	.27	.34
Philippine, pale, chips, bgs.,	lb.	.19	.24
nubs, bgs	lb.	.29	.32
seeds, bgs	lb.	.13	.19
sorts, bgs	lb.	.15	.21½
Pontianak, chips, bgs	lb.	.20	.25
nubs, bgs	lb.	.30	.08
Dammar, Batavia, A/E, bgs.	lb.	.27	.27
dust, bgs	lb.	.16	.16½
E, bgs	lb.	.18	.20
East India, batu, bold, bgs.,	lb.	.14½	.14
nubs & chips, bgs.	lb.	.08½	.07½
black, bold, bgs	lb.	.14½	.14
unscraped, bgs	lb.	.11	.11
nubs & chips, bgs	lb.	.11	.11
pale, chips, bgs	lb.	.13	.13½
nubs, bgs	lb.	.18	.18
Siam, cs	lb.	—	.35
Singapore, No. 1, bgs	lb.	.38	.40
No. 2, bgs	lb.	.28	.27
No. 3, bgs	lb.	.16	NS
dust, bgs	lb.	.16½	.16½
seeds, bgs	lb.	.18	.20
Ester, gum-rosin type, dms., c.l., dlvd. Ill., Ind., Ky., Mich., Mid Atl. States, N. E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va.	lb.	.16	.15½
wood-rosin type, dms., c.l., dlvd. Ill., Ind., etc	lb.	.15½	.15
Karaya, NF, powd., No. 1	lb.	.30	38
No. 2	lb.	.24	.32
No. 3	lb.	.20	.27
Locust bean, powd., bgs	lb.	.30	.31
Myrrh, cs	lb.	.38	.38
Olibanum, siftings, cs	lb.	.15	.15
tears, cs	lb.	.22	.22
Tragacanth, No. 1, cs	lb.	2.85	2.95
No. 2, cs	lb.	2.45	2.45
No. 3, cs	lb.	1.60	1.75
Powdered, USP, bbls	lb.	1.25	1.25
Gypsum, plaster of paris, 100-lb. paper bags, trucks, dlvd. N.Y.C.	ton.	20.30	20.30
Terra alba, dom., same basis.	ton.	19.00	19.00
imp., English 100-lb. paper bags, ex dock, N.Y.C.	ton.	55.00	55.00
ex warehouse	ton.	60.00	60.00

H

Hawthorne berries, bgs	lb.	.28	.28
Heliotropin, cryst., cns	lb.	3.25	3.50
Hellebore root, dom., green, bls.	lb.	.55	.55
Helonias root, bls	lb.	1.75	1.75



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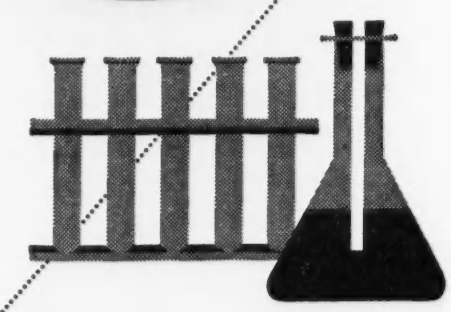

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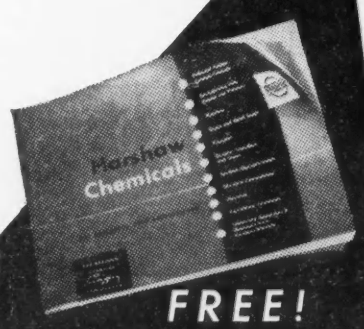

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Hematine Extract—Lime, Hydrated

	1954	1955
Hematine extract, cryst., No. 1, bbls., l.c.l.	lb. .47	.47
No. 2, bbls., l.c.l.	lb. .43	.43
No. 3, bbls., l.c.l.	lb. .41	.41
No. 4, bbls., l.c.l.	lb. .39	.39
No. 5, bbls., l.c.l.	lb. .37	.37
paste, No. 1, bbls., l.c.l.	lb. .20½	.20½
Henbane leaves, bls	lb. .40	.35
Heptane, industrial, Bayonne, N. J., tanks	gal. .19	.19
Baytown, Tex	gal. —	.14¾
Borger, Tex	gal. —	.14¾
Hesperidin methylchalcone, bots., works	lb. 50.00	50.00
Hexachlorophene, dms	lb. 2.60	2.60
Hexamethylenetetramine, tech., bgs, 1,000-pound lots, Perth Amboy or N.Y.C.	lb. .232	.232
USP, dms., 500 pounds or more, same basis	lb. .40½	.40½
Hexane, indust., Bayonne, N. J., tanks	gal. .19	.19
Baytown, Tex	gal. .15½	.15½
Borger, Tex.	gal. .15½	.15½
n-Hexanol, tanks, works	lb. .33	.33
Hexyl cinnamic aldehyde, dms.	lb. 2.25	4.50
Salicylate, dms	lb. 1.75	1.75
Hexyleneglycol, tanks, dlvd	lb. .14	.14
Hexylmethacrylate, normal, dms., less than truckloads, works.	lb. .71	.71
Hexylresorcinol, USP, dms., 50-lb. lots or more, dlvd	lb. 14.00	14.00
Histamine diphosphate, USP, bots.	kilo. 450.00	450.00
1-Histidine hydrochloride, NF, fib. dms., 50-kilo lots, works.	kilo. 80.00	80.00
Homatropine hydrobromide, USP, bots	oz. 9.35	9.35
Methylbromide, USP, bots	oz. 10.00	8.50
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton.	7.00	7.00
Hops, NF, bls	lb. .30	.30
Horehound herb, bls	lb. .16	.16
Hydrastine, bots	oz. 29.50	29.50
Hydrochloride, NF, bots	oz. 29.50	29.50
Sulfate, bots	oz. 35.00	35.00
Hydrastinine, 10-grain bots	bot. 1.95	1.95
Hydrazine, free base, ret. dms., Lake Charles, La	lb. 3.00	3.00
Hydrate, 100% ret. dms., Lake Charles, La	lb. 1.75	1.60
85%, same basis	lb. 1.35	1.35
Hydrofuramide, dms., fib. ctns., works	lb. .30	.30
Hydrogen chloride, anhyd., 50-lb. cyls., works	lb. .45	.45
Peroxide, USP, bbls., dlvd	lb. .03¾	.03¾
35%, tanks	lb. .201	.18
Hydroquinone, photo, grd., bbls., dms.	lb. .98	.98
tech., dms., frt. equald	lb. .77	.77½
Hyroxycitronnellal, cns	lb. 5.10	5.10
Hyoscyamine, bots.	oz. 15.75	15.75
Hydrobromide, bots	oz. 16.50	11.00
Sulfate, bots	oz. 12.00	10.50
Hypernic extract, cryst., No. 2, bbls., l.c.l.	lb. .52	.52
liquid, No. 1, bbls., l.c.l.	lb. .35	.35
No. 2, bbls., l.c.l.	lb. .27	.27

I

	1954	1955
Ichthammol, NF, dms.	lb. .60	.60
Indigo (see Dyes, coaltar 1171 Indigo sythetic).		
Indol, CP, bots	lb. 17.00	17.00
Inositol, dms., dlvd	lb. 4.50	4.50
Iodine, crude, kgs., USP	lb. 1.30	1.45
resub., USP, bots, jars	lb. 2.55	2.30
Iodochlorohydroxyquinolin, USP, dms	lb. 5.90	5.90
Iodoform, NF, dms., kgs	lb. 4.90	4.90
a-Ionone, cns	lb. 4.00	6.55
b-Ionone, cns.	lb. 4.30	4.30
Ipecac, root, bgs	lb. 6.25	8.00
powd., bbls., bxs	lb. 6.25	8.50
Irish moss, bleached, prime, bls.	lb. .30	.30
Iron salts (see Ferric or Ferrous).		
Isoborneol, cns.	lb. 1.25	1.25
Isobornyl acetate, cns.	lb. .65	.62
Formate, dms.	lb. .80	.80
Propionate, dms.	lb. 1.15	1.15
Isobutyl acetate, perfume grade, cns	lb. .75	.75
solvent grade, tanks, dlvd. E. of Rockies	lb. .11¼	.11¼
Isobutyraldehyde, CP, dms., c.l., dlvd	lb. —	.27½
tech., tanks dlvd.	lb. —	.19½
Isoeugenol, cns.	lb. 3.40	3.45
Isoniazid, bulk, powd., 25-kilo lots or more	kilo. 23.00	23.00
Isopentane, com'l grade, tanks, f.o.b. Tex. refy	gal .43	.15½
Isophorone, tanks, works	lb. .22½	.22½
Isopropyl acetate, tanks	lb. .10	.10
Ether, tanks, dlvd.	lb. .05	.05
Isoquinoline, dms., works	lb. .65	.65

J

	1954	1955
Jalap root, NF, bls.	lb. .38	.38
powd., bbls., bxs.	lb. .49	.49
Juniper berries, bgs.	lb. .16	.18

K

Kaolin, NF, powd., fib., dms.	lb. .08	.08
colloidal, fib. dms.	lb. .15	.15
Kola nuts, bgs.	lb. .12	.12

L

Lactose, crude, bgs., c.l., works.	lb. .18	.15
edible, fib. dms., 30,000-lb. lots, works	lb. .24	.22
Edible lactose in bgs. 1c. lower.		
USP, fib. dms., 30,000-lb. lots, works	lb. .29	.24
Lady's slipper root, bls	lb. 1.70	1.70
Lanolin, cosmetic, dms., works.	lb. .35½	.28
USP, anhyd., dms., works.	lb. .34	.26
hydrous, dms., works	lb. .33	.25
Lard, cash, dms., Chicago	lb. .17½	.12¾
Larkspur seed, bgs.	lb. .20	.20
Lauryl chloride, dms., works, frt. equald	lb. .75	.74
Methacrylate, normal, dms., less than truckloads.	lb. .65½	.65½
Lavender flowers, med., bls	lb. .55	.55
ord., bls	lb. .16	.16
select, bls.	lb. .90	.90
Lead acetate, white cryst., bbls.	lb. .32	.22
gran., bbls.	lb. .23	.23
powd., bbls	lb. .23	.22
NF, cryst., gran., powd., dms.	lb. .27½	.31
Arsenate, acid powder, dealers, 3-lb. bgs. or larger, c.l., frt. alld. on 96 lbs. or more	lb. .27½	.27½
1-lb. bgs., c.l.	lb. .41½	.41½
Blue, basic sulfate, bbls., c.l., ship't point, frt. alld	lb. .14¾	.15¾
Chloride, dms.	lb. .45	.45
Iodide, NF, V. jars	lb. 3.82	3.82
Linoleate, fused, 26.15%, dms.,	lb. .32½	.32½
Metal pigs, prime, N. Y.	lb. .1350	.1500
E. St. Louis	lb. .1330	.1480
Metallic paste, dms., 20,000-40,000 lbs., works	lb. .31¾	.33¾
Monosilicate, bgs., c.l., works, frt. equald	lb. .1450	.1580
Naphthenate, liq., 16% Pb, dms., dlvd	lb. .17½	.17¼
24% Pb, dms., dlvd	lb. .23¾	.23¾
solid, 37% Pb., dms., dlvd	lb. .31¼	.31¼
Nitrate, bbls., c.l.	lb. .22¼	.22¼
Orthosilicate gel., 50% PbO, dms., works	lb. .32¾	.32¾
60% PbO, dms., works	lb. .31¾	.31¾
Peroxide, powd., tech., bbls.	lb. .45	.38¾
Phthalate, dibasic, dms., works,	lb. 41	.41
Red, 95% Pb_3O_4, or less, bbls., c.l., ship't point, frt. alld	lb. .16	.17½
97% Pb_3O_4, bbls., c.l., same basis	lb. .16¼	.17¾
98% Pb_3O_4, bbls., c.l., same basis	lb. .16½	.18
Resinate, precip., dms., dlvd.	lb. .28½	.31
Salicylate, normal, dms., works.	lb. .46	.46
Tallate, liq., 16% Pb, dms	lb. .15¼	.15¼
24% Pb, dms.	lb. .21½	.20¼
White, basic carbonate, bgs., c.l., ship't point, frt. alld.,	lb. .16	.17½
basic silicate, bgs., c.l., same basis	lb. .15½	.16
basic sulfate, bgs., c.l., same basis	lb. .14¾	.15¾
Lecithin, edible, tech., bleached, dms., non-ret., c.l., works.	lb. .15½	.15½
unbleached, c.l., same basis.	lb. .14½	.14½
dl-Leucine, dms., works	lb. 12.25	12.25
Licorice root, bls.	lb. .08	.08
powd., bbls.	lb. .10	.10
Lignin extract, tanning grade, bgs, c.l., works	lb. .05¼	.05¼
Lime, agricultural, bgs., works.	ton. 14.50	14.50
Chemical (quicklime), lump, pebble, bulk, Adams, Mass.	ton. 12.50	12.50
Annville, Pa.	ton. 11.50	11.50
Austin, Texas	ton. 9.50	9.50
Bellefonte, Pa.	ton. 11.50	11.50
Buffalo, N. Y.	ton. 14.00	14.00
Cedar Hollow, Pa.	ton. 11.50	11.50
Duluth, Minn.	ton. 11.50	13.50
El Paso, Texas	ton. 14.00	14.00
Farnams, Mass	ton. 14.00	14.00
Gibsonburg, O.	ton. 12.50	12.50
Hannibal, Mo.	ton. 10.00	10.00
Keystone, Ala.	ton. 10.25	10.25
Lee, Mass.	ton. 12.50	12.50
Kimballton, Va	ton. 10.50	10.50
Lewisburgh, O.	ton. 10.00	10.00
Limedale, Ark.	ton. 10.00	10.00
Los Angeles, Cal.	ton. 26.84	26.84
Marble Cliff, O	ton. 11.00	11.00
Martinsburg, W. Va.	ton. 10.75	10.75
Mosher, Mo	ton. 14.50	14.50
Nelson, Ariz	ton. 10.00	10.00
Quincy, Ill	ton. 13.50	13.50
Reddick, Fla.	ton. 13.50	10.25
Scotrock, Ala.	ton. 10.25	12.25
Springfield, Mo	ton. 12.25	12.25
Winooski, Vt.	ton. 15.50	15.50
Woodville, Ohio	ton. 11.50	11.50
York, Pa.	ton. 15.50	14.50
Hydrated, paper bgs., Adams, Mass.	ton. 15.50	15.50
Annville, Pa.	ton. 14.50	14.50
Austin, Texas	ton. 13.00	14.50
Bellefonte, Pa.	ton. 14.50	16.00
Buffalo, N. Y.	ton. 16.00	16.00
Cedar Hollow, Pa.	ton. 14.50	14.50
Chicago, Ill.	ton. 15.00	15.00
Duluth, Minn.	ton. 14.00	15.00
El Paso, Texas	ton. 17.50	17.50
Engle, W. Va.	ton. 14.50	14.50
Farnams, Mass.	ton. 14.00	14.00
Gibsonburg, Ohio	ton. 16.50	16.50
Hannibal, Mo.	ton. 12.00	12.00
Keystone, Ala.	ton. 13.50	13.50
Kimballton, Va.	ton. 13.50	13.50
Knoxville, Tenn.	ton. 13.00	13.50
Lee, Mass.	ton. 15.50	15.50
Lewisburg, Ohio	ton. 14.00	14.00
Limedale, Ark.	ton. 12.00	12.00
Marble Cliff, Ohio	ton. 13.50	13.50
Menominee, Mich.	ton. 14.00	13.50
Mosher, Mo.	ton. 12.50	13.00
McNeil, Tex.	ton. 13.00	14.50
North Tazewell, Va.	ton. 12.75	12.75
Quincy, Ill.	ton. 10.00	10.50
Reddick, Fla.	ton. 16.00	16.00
Scotrock, Ala.	ton. 13.50	13.50
Springdale, Mo.	ton. 12.25	12.25
Winooski, Vt.	ton. 15.50	15.50
Woodville, Ohio	ton. 14.50	14.50
York, Pa.	ton. 14.50	14.50

THE VERSENES—"Versene" is the registered trade mark of certain synthetically prepared polyamino acids and their salts. As products of modern chelate chemistry, they form soluble, non-ionic chelates with polyvalent metallic ions and completely change their properties so that they can no longer react with other materials and be precipitated from solution by common precipitating agents.

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VERSEN-OL is the trisodium salt of N-hydroxyethylethylene diamine triacetic acid*. It is a very effective agent for chelating trivalent iron from pH7 to pH10. It forms strong 1:1 ferric chelates. After chelating the iron it will then chelate other heavy metal or alkaline earth ions.(liquid or powder).

VERSENE Fe3 SPECIFIC is the most powerful complexing agent known for *iron* in the alkaline pH range. It also chelates copper, nickel, cobalt and zinc.(47% solution).

VERSENE Fe3 is a combination of VERSENE and VERSENE Fe3 SPECIFIC. It complexes both iron and other metallic ions.(liquid or powder).

VERSENE-T complexes ferric and divalent metal ions including hard water salts in *any* caustic solution (55.5% solution).

VERSENE-9. This is the trisodium salt of EDTA. It has a pH of 9.3 in solution at 1% concentration. 1 gram complexes a minimum of 242 mgms. of $CaCO_3$. Its general chemical reaction is identical to Versene Regular.

VERSENE IRON CHELATE is an agricultural Versene to correct iron deficiency and cure chlorosis in citrus and other green growth occurring in *acid* soils. It is the disodium iron chelate of EDTA absorbed into inert vermiculite for convenience in application (50 lb. bags).

VERSEN-OL IRON CHELATE for agriculture is the monosodium iron complex of Versen-OL. It contains 19% min. of iron chelate calculated as NaFe EEDTA*, (4.29% Fe as Fe_2O_3). Balance inert. Cures iron deficiency in plants growing in *any* soil (50 lb. bags).

DISODIUM VERSENATE DIHYDRATE (dry powder) an Analytical Reagent grade of Versene Regular for research and analytical purposes.

VERSENATE INDICATOR (alcohol solution). Color indicator for Versenate method of water analysis.

CALCIUM DISODIUM VERSENATE (25% solution). Chemically Pure grade material for use as stabilizers in drugs, vitamins, pharmaceuticals.

LEAD DISODIUM VERSENATE (34% solution). Preformed complex for use in vinyl plastic emulsions.

The Versenes give you mole-for-mole control over cations in solution. They are made only under processes owned and operated by Versenes Incorporated. Quality-control over manufacture is so high that uniform complexing power is guaranteed.

VERSENES — MADE FOR YOU — Gladly will we share with you our quarter-century of experience in pioneering the polyamines. Samples for experiment will be provided on request and without obligation. Ask for Technical Bulletin #2. Chemical Counsel available. Send for prices.

*PATENT PENDING

VERSENE WATER TEST KIT. Tells Total Hardness in 2 minutes. Accurate to 1 grain per gal. Versenate Method. Complete with instructions $5.00 Postpaid.

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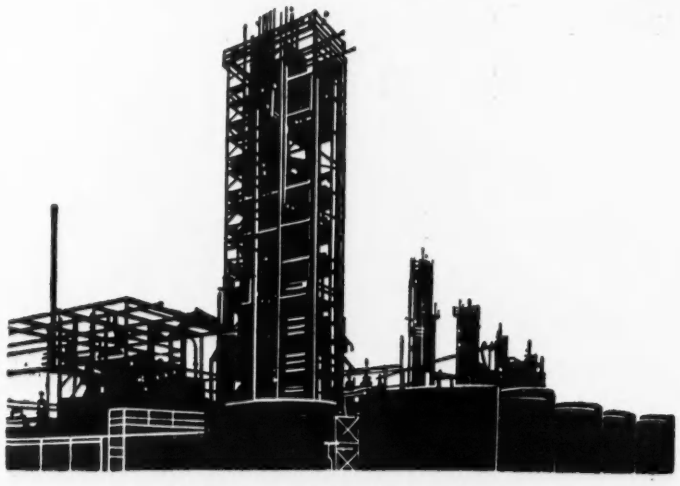
Translating flow sheets into smooth-flowing production



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Lime, Spray—Oil, Olive

		1954	1955
Lime, spray, paper bgs., Adams, Mass	ton.	17.00	17.00
Annville, Pa.	ton.	17.00	17.00
Austin, Texas	ton.	13.00	13.00
Bellefonte, Pa.	ton.	17.50	17.50
Carey, Ohio	ton.	11.00	11.00
Duluth, Minn.	ton.	15.00	17.50
Eagle, W. Va	ton.	14.50	14.50
Farnams, Mass.	ton.	14.00	14.00
Gibsonburg, Ohio	ton.	16.50	14.00
Keystone, Ala.	ton.	13.50	13.50
Kimballton, Va.	ton.	13.50	13.50
Lee, Mass.	ton.	17.50	13.50
Lewisburg, Ohio	ton.	16.00	17.00
Marble Cliff, Ohio	ton.	16.00	16.00
Menominee, Mich	ton.	14.00	14.00
Mosher, Mo.	ton.	12.50	13.00
McNeil, Tex.	ton.	16.00	16.00
North Tazewell, Va.	ton.	12.75	12.75
Reddick, Fla.	ton.	16.00	16.00
Rockland, Me.	ton.	10.00	10.00
Scotrock, Ala.	ton.	13.50	13.50
Springfield, Mo.	ton.	12.25	12.25
Winooski, Vt.	ton.	17.00	17.00
Woodville, Ohio	ton.	16.50	16.50
York, Pa.	ton.	15.50	15.50
Limestone, grd., bgs., works	ton.	3.50	3.50
Linalool, ex bois de rose, dms	lb.	5.30	7.35
ex lignaloe wood, dms.	lb.	6.75	5.30
Linalyl acetate, ex bois de rose, 90-92% dms	lb.	5.35	6.75
96-98%, dms.	lb.	6.55	6.75
ex petitgrain, bots.	lb.	3.90	3.90
Lindane, 25% formulation, dms.	lb.	2.20	1.58
98%, tech., dms., works	lb.	2.75	3.10
Linden flowers with leaves, bls.	lb.	.34	.34
without leaves, bls	lb.	.40	.40
Linseed meal expeller, 34% bulk, Midwest mills	ton.	67.50	68.00
extracted, 35%, same basis.	ton.	72.50	72.00
Litharge, com'l, powd., bbls., c.l., snip t point, frt. and	lb.	.15½	.16½
Lithium benzoate, dms.	lb.	1.67	1.65
Bromide, NF, dms., works, frt. equald	lb.	2.16	2.16
Carbonate, tech., c.l., works or dlvd	lb.	.90	.95
Chloride, CP, anhyd., ton lots	lb.	—	1.28½
tech., cryst., dms	lb.	1.22	1.10
Citrate, NF, dms	lb.	1.60	1.60
Fluoride, bbls., 10,000-lb. lots, dlvd.	lb.	2.15	2.17½
Hydride, powd., dms., works.	lb.	12.00	15.00
Hydroxide, monohydrate, dms., c.l., t.l., dlvd	lb.	1.10	.97½
Manganite, dms., works	lb.	—	.95
Nitrate, dms., 100-lb. lots	lb.	—	2.25
Salicylate, dms	lb.	1.60	1.60
Silicate, dms., works	lb.	—	1.10
Sulfate, dms., 100-lb. lots	lb.	—	1.45
Titanate, dms., works	lb.	—	1.15
Lithopone, ordinary, bgs., c.l., dlvd	lb.	.07½	.07½
Titanated (high-strength), bgs., c.l., dlvd	lb.	.10	.10
Lithopone prices, Pacific Coast 1c. per lb. higher.			
Lobelia herb, bls.	lb.	.45	1.25N
Lobeline sulphate, bots., works.	oz.	29.50	29.50
Logwood extract, crystals, No. 1, bbls., l.c.l.	lb.	.41	.41
No. 2, bbls., l.c.l.	lb.	.39	.39
liquid, No. 1, bbls., l.c.l.	lb.	.20	.20
No. 2, bbls., l.c.l.	lb.	.19	.19
No. 3, bbls., l.c.l.	lb.	18½	.18½
solid, No. 1	lb.	.35	.35
Lycopodium, cs.	lb.	1.50	1.50
dl-Lysine hydrochloride, bots.	kilo.	145.00	140.00

M

Mace, Siauw, No. 1, bls	lb.	1.10	1.40
West Indian, bls	lb.	NS	1.40
Magnesia, calcined, tech., etns., works	lb.	.32	.25½
Syn. rubber grade, etns., works	lb.	.31	.29¼
USP, light, etns	lb.	.34	.35
heavy, bbls	bl.	.36	.36
Magnesite, chemical grade, bgs., c.l., works, frt. equald	ton.	82.50	82.50
dead-burnt, bulk, c.l., standard grain, Chewalah, Wash.	ton.	38.00	38.00
Magnesium bromide, jars	lb.	.90	.90
Carbonate, tech., bgs., c.l., frt. equald	lb.	.09½	.10½
USP, bgs., c.l., frt. equald	lb.	.11¼	.12½
Above prices are quoted f.o.b works, freight equalized with metropolitan New York and competitive producing points.			
Chloride, anhyd., lump, 95-98%, dms., c.l., works, frt. equal	lb.	.12¾	.12¾
hydrous flake, dms., l.c.l., works	ton.	50.00	50.00
Gluconate, dms., cns	lb.	1.30	1.30
Hydroxide, NF medicinal, bbls., dms., kgs	lb.	.26½	.26½
Hypophosphite, dms	lb.	1.60	1.60
Metal, 98.8% ingots, cs., works	lb.	.27	.27
sticks, cs., works frt. alld. on carlots	lb.	.45	.46
Peroxide, 15%, dms., works.	lb.	1.00	1.00
Phosphate, tribasic, NF, bbls.	lb.	.75	.75
Silicofluoride, bbls., works	lb.	.09	.09
Trisilicate, USP, dms., 5,000-lb. lots	lb.	.38	.38
Malathion, dms., c.l., works	lb.	—	.94
Maleic anhydride, dms., c.l., dlvd. E. of Rockies	lb.	.27	.27
Mandrake root, bls	lb.	.32	.30
Manganese acetate, bbls., dlvd.	lb.	.35	.35
Arsenate, bgs	lb.	.16	.16
Borate, tech., bbls	lb.	.24	.24
Carbonate, bbls., works	lb.	.21	.21
Dioxide, African, 84-87%, 40-000 to 99.999-lb. lots, paper bgs., gross for net, works	ton.	88.00	88.00
Gluconate, dms., cs.	lb.	1.79	1.79
Glycerophosphate, NF, fib. dms.	lb.	4.70	4.70
Hydrate, bbls., dlvd	lb.	.33¼	.33¼
Hypophosphite, NF, dms	lb.	2.00	3.52
Linoleate, liquid, 4.35% Mn, dms	lb.	.30½	.32½
solid, precip., 8.2% Mn, bbls.	lb.	.33½	.37½
Metal, cs., dlvd. East	lb.	.30	.30
Naphthenate, liquid, 6% Mn, dms., frt. alld	lb.	.25	.27
Resinate, fused, 3½% Mn, dms	lb.	.21¾	.23
precip., dms.	lb.	.24½	.27
Sulfate, fertilizer grade, 65%, bgs., c.l., dlvd. S.E.	ton.	80.50	80.50
Tallate, 6%, dms	lb.	.21¾	.24
Mangrove bark, E. Africa, 38% tanin, c.l., ex dock	ton.	77.00	68.00
So. American, 30% tannin, c.l., ex dock	ton.	57.50	55.00
Mannitol, com'l, dms., works	lb.	.40	.40
reagent 50-lb. dms., works.	lb.	.85	.85
Melamine, bgs., ton lots, works.	lb.	.33	.33
Menadione, USP, bots.	gram.	.06	.06
Menthol, nat., USP, Brazilian, cs.	lb.	5.10	7.75N
Japanese cs.	lb.	3.00	13.00
synth., USP racemic, cns	lb.	4.95	5.45
Menthyl salicylate, tins	lb.	4.00	4.00
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, frt. alld.	lb.	.38	.38
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton lots, works, frt. alld	lb.	.48	.48
Mercuric chloride, NF, cryst., dms., 50 lbs. or more	lb.	3.68	4.98
gran., powd., dms., 50 lbs. or more	lb.	3.53	4.78
Cyanide, NF VIII, powd., fib. dms	lb.	5.29	6.84
Iodide, red, NF, fib. dms	lb.	6.22	7.72
Oxide, yellow, USP, fib. dms.	lb.	4.64	5.97
Mercury Metal, 76-lb. flask, net.	flk.	189.00	320.00
Mesityl oxide, tanks, dlvd.	lb.	.11½	.11½
Metaldehyde, dms., works	lb.	.95	.95
Metatolylenediamine (see 2,4-Tolylenediamine).			
Methanol, nat., denaturing grade tanks, frt. alld	gal.	.70	.70
Prices on natural methanol W. of Miss. 3c. higher. syn., Zone 1, tanks, frt. alld.	gal.	.32	.27
Zone 2, tanks, frt. alld	gal.	.35½	.32
Synthetic methanol zones are: Zone 1 is all continental U. S., E. of Eastern boundaries of Ariz., Idaho, Mont., and Utah. Zone 2 is remainder of the U. S., West of above state boundaries, comprising Ariz., Calif., Idaho, Mont., Nev., Ore., Utah and Wash.			
dl-Methionine, fib. dms., frt. alld. 50 lbs. or more	lb.	4.55	3.50
feed grade, 98%, fib. dms., same basis	lb.	3.00	2.65
Methoxyclor, 50% wettable powder, dealers, dms., cs., frt. alld	lbs.	.61	.61
Methyl abietate, non-ret. dms., dlvd., zone 1	lb.	.20½	.20½
hydrogenated, non-ret. dms., c.l., dlvd., zone 1	lb.	.21	.21
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn., St. Louis, Mo., Miss., Ala., Ga., Fla., S. C. and Tenn.			
Acetone, nat., tanks, frt. alld. E	gal.	.45	.45
syn., tanks, frt. alld. E	gal.	.54½	.45
Synthetic methyl acetone, East territory is Mont., N. Mex. and Wyo. West territory in all states west of those three.			
Acrylate, tanks, works	lb.	.42¾	.43¾
Anthanilate, cns	lb.	2.35	2.50
Benzoate, cns, dms	lb.	.53	.53
Bromide, jobbers, cyls., various sizes, works	lb.	.47	.47
Cellulose, special vis., (1,500-4,000 cps.) 50-lb. bgs., c.l., works	lb.	.78	.78
standard, vis. (15-400 cps.) 50-lb. bgs., c.l., frt. alld	lb.	.66	.66
Chloride, indust., tanks, multi-unit, works	lb.	.15	.15
single-unit works	lb.	.11½	.11½
refrigerator mfrs., cyls., dlvd.	lb.	.39	.40
other consumers or service-men, cyls., dlvd	lb.	.486	.57
Cinnamate, cns	lb.	1.43	1.43
Cyclohexanol, tanks, works	lb.	.34	.34
Ethyl ketone, tanks, dlvd.	lb.	.11	.11
Formate, refd., dms	lb.	.35	.35
tech., tanks, works	lb.	.07	.07
Heptin carbonate, bots	lb.	35.00	33.00
p-Hyaroxybenzoate, fib. dms.	lb.	1.90	1.90
Ionone, standard, cns., dms	lb.	3.80	3.80
Isobutyl carbinol, tanks, dlvd.	lb.	.13	.13
ketone, tanks, dlvd	lb.	.13	.13
Lactate, dms., l.c.l., works	lb.	.35	.35
Methacrylate, dms., c.l., t.l., frt. equald with Belle, W. Va. and Arlington, N. J.	lb.	.35	.35
Naphthyl ketone, cns	lb.	3.60	3.60
Parahyaroxybenzoate, (see Methyl p-hydroxybenzoate).			
Roseaniline chloride, NF, fib. dms	lb.	5.44	5.44
Salicylate, USP, dms., 500 lbs.	lb.	.53	.58
Testosterone, USP, 100 grams.	gram.	.70	.79
Methylamyl acetate, tanks, dlvd. E	lb.	.13	.13
Ketone, dms., works	lb.	1.05	1.05
Methylene blue, 100-lb. lots, kgs., frt. adjusted	lb.	3.25	3.25
Chloride, indust., dms., c.l., dlvd.E	lb.	.11½	.13½
2-Methyl-5-ethyl pyridine, tanks, works	lb.	.46	.46
Methylionone A, cns	lb.	6.55	5.20
D, cns.	lb.	7.50	7.50
prime, cns	lb.	4.55	4.55
b-Methylnaphthalene, 32°C. m.p., dms., works	lb.	.90	.90
Mica, dry-grd., paint, plastic, 100 mesh, bgs., c.l., works.	lb.	.04¼	.04½
roofing, 20 to 80 mesh, bgs., c.l., works	lb.	.04	.03
wet-grd., biotite, bgs., c.l., works, frt. alld. E	lb.	.06¼	.06¼
paint or lacq., bgs., c.l., works, frt. alld. E	lb.	.07¾	.07¾
rubber, bgs., c.l., works, frt. alld. E	lb.	.07½	.07½
wallpaper, bgs., c.l., works, frt. alld. E	lb.	.07¾	.07¾
white extra fine, bgs., c.l., works, frt. alld. E	lb.	.07¾	.07¾
Mica, wet-grd., W. of Miss. R., ½c. higher; W. of Rockies, 1c. higher.			
Milk powder, non-fat roller, bbls., c.l.	lb.	.14	.12
spray, bbls., c.l.	lb.	.16¼	.14
whole, roller, bbls., c.l.	lb.	NP	NP
spray, bbls., c.l.	lb.	.32½	.27
Sugar (See Lactose).			
1 Mineral spirits (See Petroleum Mineral spirits.)			
Molasses, blackstrap, feed grade, tanks, N. Y.	gal.	.12½	.11½
Molybdenum (metal) powd., 80 or 200 mesh, etns, works	kilo.	8.80	8.80
Trioxide, pure, kgs., works, basis, Mo. content	lb.	1.40	1.35
tech., kgs., works, basis, Mo. content	lb.	1.15	1.05
Monobutylamine, tanks, E. of Rockies	lb.	.53	.53
Monochlorobenzene, tanks, frt. alld. or dlvd. E	lb	.10	.10
Monoethanolamine, tanks, dlvd. E	lb.	.28	.25
Monoethylalphanaphthylamine (see N-ethyl-a-naphthylamine).			
Monoethylamine, 70% contained amine, dlvd	lb.	.31	.31
Monoethylaniline (see N-ethylaniline).			
Monoethylorthotoluidine (see N-ethyl-o-toluidine).			
Monoisopropylamine, tanks, frt. alld. E. of Rockies	lb.	.28½	.28½
Monomethylamine, 25%-40% tanks, works, basis 100%	lb.	.31	.31
Monotertiary butylmetacresol (see 6-tert-Butyl-m-cresol).			
Morphine, cns	oz.	12.40	12.40
Acetate, anhyd., cns	oz.	9.95	9.95
Hydrobromide, cns	oz.	9.90	9.90
Hydrochloride, NF, cns	oz.	9.90	9.90
Sulfate, USP, cns	oz.	9.90	9.90
Morpholine, tanks, dlvd. E	lb.	.52¾	.52¾
Musk, nat., Tonquin, grains, bots,	oz.	NS	NS
syn., ambrette, 100 lbs. or more, fib. dms.	lb.	5.15	5.15
ketone, 100 lbs. or more, fib. dms.	lb.	5.30	5.30
xylol, 100 lbs. or more, fib. dms.	lb.	1.40	1.40
Mustard seed, Danish, yellow, bgs.	lb.	.11	.12
Dutch, yellow, bgs	lb.	.10½	NP
English, yellow, bgs	lb.	.11	NP
Montana, oriental, bgs., source	lb.	.12	NP
yellow, bgs., source	lb.	.08¼	.12½
Myrobalans, J1, ord. bgs., ex dock	ton.	44.00	43.00
assorted, ex dock	ton.	48.00N	54.00
crushed, bgs., ex dock	ton.	61.50	63.00
extract, indian, solid, 53% tannin, ex dock plus duty	lb.	.07¼	.07¼N

N

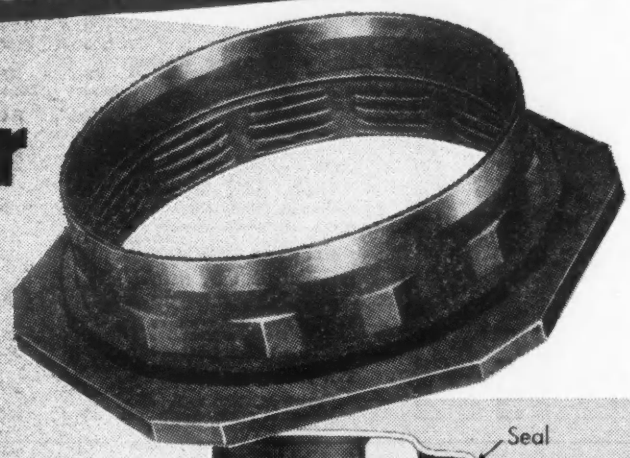
Naphthalene, dom., crude, 74°, tanks, frt. equald	lb.	.04½	.05½
78°, tanks, frt. equald	lb.	.05	.06¼
refd., indust., tanks, same basis	lb.	.09¾	.10¾
balls, flakes, wholesalers, jobbers, bbls., c.l., same basis	lb.	.13¾	.13¾
imp. crude, 78°, large lots	lb.	.03¼	.05¾
a-Naphthol, bbls., frt. alld.	lb.	1.00	1.00
b-Naphthol, resublimed, dms., works	lb.	.78½	.78½
tech., bbls., c.l., works	lb.	.32½	.32½
Salicylate, dms	lb.	5.00	5.00
Sulfate, cns	lb.	35.00	35.00
a-Naphthylamine, bbls., frt. alld	lb.	.50	.50
b-Naphthylamine, tech., bbls., works	lb.	1.05	1.05
o-Nitrobiphenyl, tech., tanks, works	lb.	.13	.13
a-Nitronaphthalene, bbls., frt. alld	lb.	.41	.41
Neocinchophen, USP, dms., frt. adjusted	lb.	7.00	7.00
Neomycin, fib. dms., 100-kilo lots, basis activity gram.		.60	.60
Nerolin, cns	lb.	2.15	2.15
Nickel acetate, bbls., dlvd	lb.	.75	.77
Carbonate, bbls., dlvd	lb.	.71	.73¾
Chloride, bbls., dlvd	lb.	.37	.38½
Formate, bbls., ton lots, frt. alld	lb.	.64	.68
Metal, electro cathodes, cs., works	lb.	.60	.64½
Nitrate, bbls., works	lb.	.33½	.37
Oxide, black, bbls.	lb.	.69	.76
green, bbls.	lb.	NP	.76
Sulfate, bgs., c.l., dlvd	lb.	.29	.30¾
Nicotinamide, USP, dms., frt. adjusted	kilo.	12.00	12.00
Hydrochloride, dms., frt. adjusted	kilo.	11.50	11.50
Nicotine sulfate, 40%, 50-lb. dms.	lb.	1.20	1.20
Niger seed, bgs., afloat	lb.	.11½	.12½
Nikethamide, cbys	lb.	7.50	7.50
m-Nitroaniline, dms., frt. alld.	lb.	1.05	1.05
o-Nitroaniline, flaked, dms	lb.	.54	.54
powd., dms	lb.	—	.60
p-Nitroaniline, dms., l.c.l., frt. alld	lb.	—	.51½
Nitrobenzene, dbl. dist., tanks, frt. alld	lb.	.11	.11
Nitrocellulose, ester-soluble, 30-35 cps., ¼-sec., 5-6, 15-20, 30-40, 60-80, 125-175, secs., bbls., c.l., works	lb.	.34	.34
18-25 cps., bbls., c.l.	lb.	.36	.36
250-400, 600-1,000 secs., bbls., c.l., same basis.	lb.	.39	.39
spirit-soluble, 30-35 cps., ¼-, ½-secs., bbls., c.l., same basis	lb.	.41	.41
5-6, 40-60 secs., bbls., c.l., same basis	lb.	.40	.40
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra, but returnable.			
o-Nitrochlorobenzene, dms	lb.	.20	.20
p-Nitrochlorobenzene, kgs., works.	lb.	.26	.26
Nitroethane, dms., works	lb.	.25	.25
Nitrogen solution, tanks, works, 37-40%, 8% N	ton.	128.00	128.00
Nitrogenous process tankage, bulk, works	unit-ton.	3.50	5.00
Sewage sludge, bulk, works.	unit-ton.	3.75-4.50	2.95-4.50
2-Nitro-4-chlorophenol, dms	lb.	.75	.75
Nitromethane, dms., dlvd. E. of Rockies	lb.	.25	.25
Nitropropane, 1, dms., dlvd. E. of Rockies	lb.	.23¼	.23¼
2 dms., dlvd. E. of Rockies.	lb.	.25	.25
o-Nitrophenol, dms., works	lb.	.94	.94
p-Nitrophenol, kgs., works, frt. equald	lb.	.50	.50
o-Nitrotoluene, tanks, frt. alld.	lb.	.09	.09
m-Nitro-p-toluidine, dms.	lb.	1.50	1.59
Nitrous ether, conc., bots., 100-lb. lots	lb.	1.28	1.28
p-Nitrotoluene, dms., works	lb.	.33	.33
Nonyl-phenol, tanks, works	lb.	.29	.24
Nutgalls, Aleppo, bgs.	lb.	.38	.38
Chinese, bgs	lb.	.45N	.45N
Nutmegs, East Indian, whole, bgs	lb.	.38	.46
shrivel, bgs.	lb.	.38	.44
West Indian, bgs.	lb.	.29	.93
Nux vomica, bls.	lb.	.10	.10
powdered, bbls., bxs	lb.	.15	.15

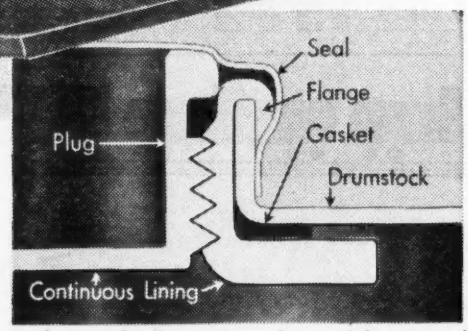
O

Octane, industrial, tanks, Bayonne, N. J.	gal.	.19	.19
Baytown, Tex.	gal.	—	.15¾
Borger, Tex	gal.	—	.15¾
n-Octanol, tech., tank, dlvd	lb.	.394	.394
Octyl phenol, tanks, works	lb.	.22¼	.22½
Oil, abies siberica, cns	lb.	2.05	2.80
Almond, natural, bitter, F.P.A., bots	lb.	3.00	3.00
NF, bots.	lb.	3.00	3.25
sweet, USP, dms., cns.	lb.	.49	.55
Amyris, dms.	lb.	1.40	1.40
Angelica root, bots.	lb.	70.00	66.00
seed, bots.	lb.	56.00	56.00
Anise, USP, Chinese, dms	lb.	2.75	3.50
Apricot, kernel, USP, dms	lb.	.45	.45
Avocado, cns.	lb.	3.25	NS
Bay, NF, Puerto Rican, 50-55%, cns	lb.	1.45	1.55
55-60%, cns.	lb.	1.65	1.90
West Indian, 50-55%, cns., dms	lb.	1.45	1.45
Bergamot, natural, NF, Italian, cns	lb.	10.75	10.50
Birchtar, crude, cns	lb.	1.75	1.50
rectified, NF, cns	lb.	2.50	2.00
Bois de rose, Brazil, cns	lb.	4.00	4.50
Bone, dms., works	gal.	.55	.65
Cajeput, redist., USP, cns	lb.	2.45	1.75
tech., cns.	lb.	1.90	2.25
Calamus, cns.	lb.	12.00	12.00
Camphor, nat., sassafrassy, dms	lb.	.26	.38
white, dms.	lb.	.26	.31
Cananga, native, cns.	lb.	3.35	7.35
rectified, cns.	lb.	12.50	12.50
Caraway, NF, cns.	lb.	3.35	3.25
Cardamom, NF, bots.	lb.	29.00	26.00
Castor, blown, dms., c.l.	lb.	.21	.20
dehydrated, bodied, tanks	lb.	.2210	.2230
unbodied, tanks	lb.	.2110	.2110
hydrogenated, bgs	lb.	.2650	.2350
No. 1, Brazilian, tanks	lb.	.1550	.14¾
USP, tanks	lb.	.18	.18
refd. and deodorized, tanks.	lb.	.2050	.1800
No. 3, tech., tanks	lb.	.1775	.1950
sulfonated, 50% (48% fat), dms	lb.	.13½	.13½
75% (60-62% fat), dms., l.c.l.	lb.	.17	.17
Cedarleaf, cns., dms.	lb.	2.00	2.65
Cedarwood, cns., dms.	lb.	.47	1.00
Celeryseed, bots.	lb.	15.50	13.00
Chamomile, blue, Hungarian, bots	lb.	175.00	175.00
Cinnamon bark, USP, bots	lb.	18.50	25.00
leaf, Ceylon, bots.	lb.	1.25	1.75
USP, cns., dms. (Cassia)	lb.	NS	NS
Citronella, Ceylon, cns., dms.	lb.	.60	1.10
Java, true, cns.	lb.	.70	1.35
Java-type, ns.	lb.	.60	1.35
Clove, USP, dms., cns.	lb.	5.25	3.25
Coconut, crude, tanks, N. Y.	lb.	.17	.14
Pac. Coast	lb.	.16	13½
refd., Cochin, type, tax incl., dms., l.c.l.	lb.	.25	.21¾
deodorized, tax incl., non-ret. dms., l.c.l.	lb.	.27¾	.23½
Cod, Newfoundland, dms	lb.	.09½	.09½
Codliver, USP, dms	gal.	1.85	1.50
Copaiba, cns.	lb.	1.80	1.80
Coriander, USP, bots.	lb.	16.90	14.50
Corn, crude, tanks, works	lb.	.13⅜	.13⅜
foots, (soapstock) acid, 95%, tanks, N. Y.	lb.	.04½	.05⅛
refd., tanks	lb.	.16⅜	.16⅜
Costus, bots.	oz.	9.00	9.00
Cottonseed, crude, tanks, Southeast	lb.	.12½	.13⅛
foots (soapstock) acid, 95%, tanks, N. Y.	lb.	.02¾	.05
raw, 50%, tanks, same basis	lb.	.01¼	.02⅝
salad, tanks	lb.	.17⅜	.16⅛
Cubeb, cns.	lb.	4.50	4.50
Cumin, bots.	lb.	4.15	4.15
Cypress, bots.	lb.	5.30	5.30
Dillseed, India, bots.	lb.	2.80	2.80
Dillweed, dom., bots	lb.	3.40	3.75
Erigeron, cns.	lb.	5.50	5.50
Eucalyptus, NF, rectified, 80-90%, dms	lb.	.82	.67
70-80%, dms.	lb.	.60	.85
Fennel, sweet, USP, cns.	lb.	2.60	2.30
Fir, Canada, cns.	lb.	2.65	2.35
Fish, refd., alkali, dms	lb.	.1450	.1400
kettle bodied, dms.	lb.	.1630	.1630
light pressed, tanks	lb.	.11½	.11
Fishliver, crude, for feeds or concentrating, 4,000 to 12,000 A units per gram, dms	1,000,000 units.	.08	.08
10,000 to 20,000 A units per gram, dms.	1,000,000 units.	.09	.09
25,000 to 35,000 A units per gram, dms	1,000,000 units.	.09	.09
40,000 to 55,000 A units per gram, dms	1,000,000 units.	.10½	.10⅛
100,000 A units per gram, dms	1,000,000 units.	.12	.12
200,000 A units per gram, dms	1,000,000 units.	.12	.12
300,000 A units per gram, dms	1,000,000 units.	.12	.12
400,000 A units per gram, dms	1,000,000 units.	.12	.12
500,000 A units per gram, dms	1,000,000 units.	.12	.12
Garlic, pure, bots	oz.	8.50	6.50
Geranium, Algerian, cns	lb.	8.35	10.50
Bourbon, cns	lb.	10.75	11.25
Ginger, dist., bots	lb.	10.00	12.25
Grapefruit, dms	lb.	3.15	2.50
Grease, No. 1, dms	lb.	.11¼	.14⅛
extra, winter, strained, dms.	lb.	.15½	.17⅛
prime, burning, dms	lb.	.16¼	.19
Guaiacwood, cns	lb.	1.40	1.40
Hemlock, cns	lb.	2.10	2.70
Juniper berry, NF, VIII, bots.	lb.	2.70	2.75
twice rectified, bots	lb.	3.60	3.60
Laurel, dms., cns	lb.	9.50	9.75
Lavandin, dms., cns	lb.	2.00	2.50
Lavender flower, USP, French, 30-32% ester, cns	lb.	2.50	3.55
38-40% ested, cns	lb.	5.60	9.50
40-42% ester, cns	lb.	5.75	10.00
spike, Spanish, cns	lb.	1.50	1.85
Lemon, USP, Calif., cns	lb.	7.10	4.60
Messina, cns	lb.	7.00	6.05
Lemongrass, cns., dms	lb.	1.15	2.50
Lignaloe wood, Mexican, cns.	lb.	3.50	3.20
Lime, dist., Mexican, cns	lb.	5.25	3.25
West Indian, cns	lb.	5.90	3.50
expressed, West Indian, cns.	lb.	7.75	7.75
terpeneless, bots	lb.	29.50	29.50
Linseed, raw tankcars, N. Y.	lb.	.1625	.1505
Mace, dist., cns., dms	lb.	2.45	2.75
Menhaden, crude, tanks, Balto.,	lb.	.07½	.08¾N
Mustard, seed, nat., dms.	lb.	.15¾	.18N
syn., cns., dms	lb.	1.55	1.60
Neatsfoot, 15°, dms	lb.	.33	.33
20°, dms	lb.	.32	.32
30°, dms	lb.	.30	.30
Neroli, NF, French, bots.	lb.	165.00	85.00
Spanish, bots	lb.	38.50	35.00
Nutmeg, USP, dist., East Indian, cns., dms.	lb.	2.85	2.75
West Indian, cns., dms.	lb.	2.60	2.60
Ocotea cymbarum, dms	lb.	.70	1.10
Oiticica, liq., tanks	lb.	.16¾	.15⅛
Oleo, extra, dms.	lb.	.18¾	.17
Olibanum, bots.	lb.	5.50	5.50
extra fine, bots.	lb.	8.00	8.00
Olive, edible, dms., duty paid,	gal.	2.30	2.35

Tri-Sure® Coated Polygonal Flange

To give you better LINED CONTAINERS!

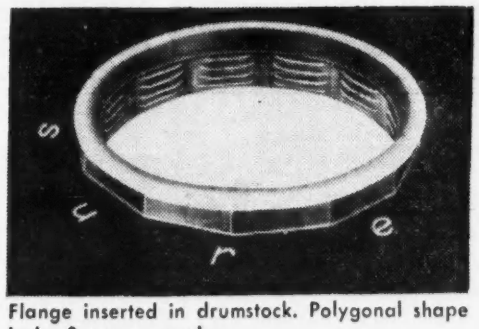




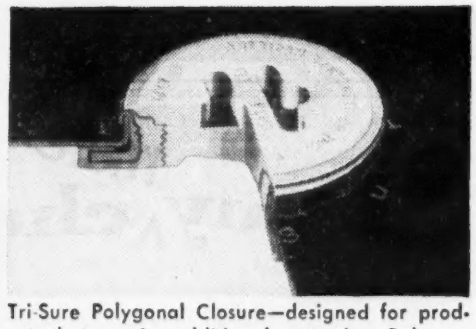
Gaskets seal off contact surfaces of flange and drumstock, maintaining the protection of a continuous lining.

—another development in the Tri-Sure program to help shippers solve their container problems

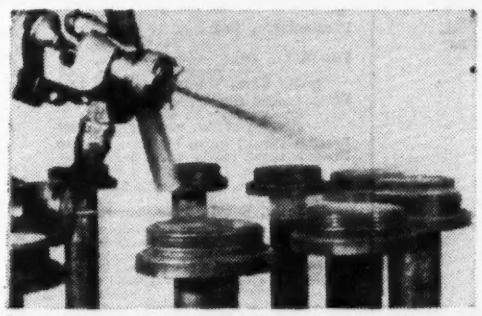
Drumstock is bent to form a collar so that neck of flange can be keyed to container when inserted.



Flange inserted in drumstock. Polygonal shape locks flange securely.



Tri-Sure Polygonal Closure—designed for products that require additional protection. Polygonal Flange is completely enclosed in polyethylene, and used with Tri-Sure Polyethylene Plug.



Spraying coating on Tri-Sure Plugs in the Tri-Sure factory. This *Tri-Sure factory coating*—to your exact specifications—is your assurance of obtaining coated fittings that give you maximum protection.

Always specify **Tri-Sure** Reg. U. S. Pat. Off **CLOSURES**

If your product requires protection from contact with metal, it can be shipped with perfect security in lined containers that are equipped with the new *Tri-Sure coated Polygonal Flanges*, and coated or plastic plugs.

This new Tri-Sure Flange, designed especially for lined containers, completely shields the contents of the drum from the metal of the fitting, so that the protection of the lined container is *complete*. At the same time it maintains all of the exclusive features of Tri-Sure Closures which safeguard the contents from leakage, tampering and contamination.

The Tri-Sure Polygonal Flange can be used in your full line of containers—coated, lithographed or standard—without requiring any new tools in your filling line. It can be supplied zinc-plated, tin-plated or unplated—single-coated or double-coated; or with a polyethylene overlay. It is also available in aluminum.

When ordering coated flanges and plugs, take advantage of our extensive experience in the development of coated fittings by specifying *Tri-Sure factory coated*. The fittings will be coated to your exact specifications with perfect uniformity and thorough coverage of the threads.

The Tri-Sure Closure using the Polygonal Flange, with or without overlay, and plastic or metal plug has I. C. C. approval.

*The "Tri-Sure" Trademark is a mark of reliability backed by over 30 years serving industry. It tells your customers that genuine Tri-Sure Flanges (inserted with genuine Tri-Sure dies), Plugs and Seals have been used. Tri-Sure Flanges for coated containers and Tri-Sure plastic plugs are the subjects of U. S. and Foreign Patents and Patents Pending.

AMERICAN FLANGE & MANUFACTURING CO. INC., 30 ROCKEFELLER PLAZA, NEW YORK 20, N.Y.
Tri-Sure Products Limited, St. Catharines, Ontario, Canada

Oil, Orange—Petroleum, Mineral Spirits, Gr. 3, Tanks

	1954	1955
Oil, orange, sweet, dist., cns	lb. .40	.40
expressed, USP, Brazilian, cns., dms	lb. NS	NS
Calif., cns.	lb. .70	.60
Florida, cns.	lb. .66	.45
Messina, cns	lb. 3.85	3.85
West Indian, cns.	lb. 2.75	2.50
sesquiterpeneless, bots	lb. 135.00	65.00
Origanum, Spanish, cns	lb. 1.95	1.75
Palm, clarif., tanks	lb. .12¾	.1260
kernel, denat., tanks	lb. .15N	.13½
Palmarosa, cns.	lb. 5.00	8.00
Paraffin, pale, 100-110 vis. at 100° F., tanks, East Coast refy.	gal. .14	.14
Patchouli, dms.	lb. 7.20	8.00
Peanut, crude, tanks, Southeast	lb. .17	.19
refd., tanks	lb. .20½	.22
Pennyroyal, USP, imp., cns	lb. 1.60	1.90
Peppermint, nat., dms	lb. 5.60	7.75
redist., USP, dms.	lb. 5.85	8.10
Petitgrain, Paraguay, cns., dms	lb. 2.45	4.25
Pimento berry, NF, dms	lb. 4.20	6.00
leaf, cns	lb. 2.35	2.55
Pine, dest-dist., dms., l.c.l., works	lb. NP	.11¼
steam-dist., dms., ex-whse., N.Y.C.	lb. NP	.163
Rapeseed, tanks	lb. .16¼	.17
Rice bran, clarif., dms	lb. .16½	.17½
Red (see oleic acid).		
Rose, nat., Bulgarian, bots.	oz. 55.00	43.50
Rosemary, Spanish, tech., cs., dms.	lb. .60	.50
USP, cns., dms	lb. .75	.75
Rue, bots	lb. 2.25	1.65

	1954	1955
Oil, safflower, tanks, Atlantic Coast	lb. .15¾	.1760
Sage, clary, bots	lb. 20.00	20.00
Dalmatian, cns	lb. 7.50	4.25
Spanish, cns	lb. .90	.90
Sandalwood, NF, cns	lb. 9.50	11.50
Sardine, crude, tanks, Pac. coast	lb. NS	.68½N
Sassafras, artif., dms	lb. .50	.90
nat., dom., USP, cns., dms.	lb. 1.70	1.75
Savin, cns	lb. 2.75	2.75
Shingle stain, tar distillate, tanks, works	gal. .23	.23
Snakeroot, Canada, cns	lb. 29.50	28.50
Soybean, crude, tanks, mills.	lb. .12⅛	.12⅜
foots (soapstock) acid, 95%, tanks, N. Y.	lb. .05½	.05¾
raw, 50%, tanks, N. Y.	lb. .02½	.02⅜
refd., alkali, tanks	lb. .14¾	.14⅞
clarif., tanks	lb. .14¼	.14⅜
salad, tanks	lb. .15¼	.15⅜
Spearmint, USP, dms	lb. 6.00	4.00
Sperm, bleached, winter, 45°, tanks	lb. .12	.14½
nat., winter, 45°, tanks	lb. .11	.1350
Spruce, cns., dms	lb. 2.10	2.00
Sweet, birch, USP, Northern, cns	lb. 4.25	4.25
Southern, cns	lb. 2.00	2.50
Tall, crude, tanks, works	lb. .02¼	.02¼
refd., tanks, works	lb. .05	.05
Tallow, acidless, dms	lb. .13½	.12½
Tansy, dms	lb. 8.25	7.75
Tar, pine, coml., tanks, works, gal.	.42½	.528
rectified, NF, l.c.l., dms., extra, works, South	gal. .67	.77

	1954	1955
Oil, thyme, NF, red, cns., dms.	lb. 1.70	1.70
white, cans	lb. 1.95	1.95
Tung, dom., tanks, mills.	lb. .25½	.21½
imp., tanks	lb. .23½	.21¾
Turpentine, rectified, NF, cns., dms.	lb. .30	.20
Vetiver, Bourbon, cns	lb. 15.85	14.00
Haitian, cns	lb. 12.25	11.80
Java, cns	lb. 22.50	22.50
Wheat germ, 5-gal. dms.	gal. 10.00	10.00
White mineral, tech., 50-65 vis., dms., c.l.	gal. .51½	.51½
65-75 vis., dms., c.l.	gal. .52½	.52½
NF, 80-90 vis., dms., c.l.	gal. .53½	.53½
125-135 vis., dms., c.l.	gal. .59½	.59½
145-155 vis., dms., c.l.	gal. .66	.66
175-185 vis., dms., c.l.	gal. .69½	.69½
USP, 200-210 vis., dms., c.l.	gal. .72½	.73½
345-355 vis., dms., c.l.	gal. .77	.77
Wintergreen, USP, nat., Northern, cns.	lb. 7.15	6.35
Southern, cns	lb. 3.20	3.20
Wormseed, USP, cns	lb. 4.60	5.00
Wormwood, cns	lb. 5.50	5.00
Ylang-ylang, Bourbon, bots.	lb. 20.00	17.00
extra, bots	lb. 25.00	28.00
Oleostearine, bbls	lb. .11¾N	.13
Opium, USP, cns	lb. 19.20	19.20
gran., USP, cns	lb. 21.65	21.65
powd., USP, cns	lb. 21.65	21.65
Orange, cadmium lithopone, bbls., frt. alld., E. of Rockies	lb. 1.59	1.56

	1954	1955
Orange, chrome, CP, bbls., dlvd. N. of Tenn., and N.C.; E. of Miss. River, includ. Davenport, Tenn., and N. C.; E. of Minneapolis, Rock Island, St. Louis, St. Paul	lb. .31	.31

Chrome orange prices are ½c. higher, dlvd. Ala., Ga., La. (Shreveport); 1¼c. Miss., N. C.; 1½c. El Paso and Fort Worth, Tex.; 2c. Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. higher Pac. Coast; for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.

Dinitroaniline toner	lb. 1.30	1.30
Mineral, American, bbls., l.c.l., ship't point, frt. alld.	lb. .1910	.2035
Molybdated, bbls	lb. .44	.45
o-Nitroaniline toner, kgs.,	lb. 1.15	1.15
Persian, bbls	lb. .65	.65
Orange peel, bitter, Haitian, bls.	lb. .12	.14
sweet, bls	lb. .16	.16
Orris root, Florentine, bls	lb. .35	.45
powd., bls., bxs	lb. .40	.50
Verona, bls	lb. .23	.35
powd., bbls., bxs	lb. .28	.40

Orthoaminobiphenyl (see o-Aminobiphenyl).
Orthoanisidine (see o-Anisidine).
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitrobiphenyl (see o-Nitrobiphenyl).
Orthonitroparachlorophenol (see 2-Nitro-4-chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenatidine (see o-Phenotidine).
Orthophenylphenol (see o-Phenylphenol).
Ortho-tertiary-aminophenol (see o-tert-Amylphenol).
Orthotoluidine (see o-Tuloidine).

Osage orange, cryst., No. 1, bbls.	lb. .40	.40
extract, liq., No. 1, bbls.	lb. .19	.19
Ouabaine, USP, bots	gm. 3.00	3.00
Oxyquinolin sulfate, cns., 100 lbs., works	lb. 4.75	4.75

P

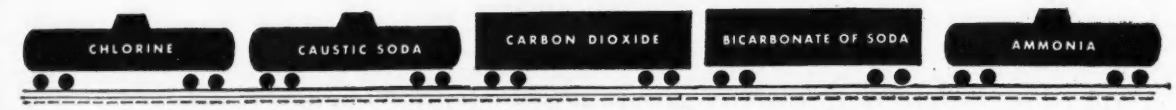
Pancreas substance, assay 1:75, bots., 5-lb. or more	lb. 5.75	4.00
Pancreatin, USP, bots	lb. 2.50	1.90
Papain, powd., African, dms.	lb. 5.00	4.00
Ceylon, dms	lb. 4.00	3.00
Papaverine, nat, or syn., hydrochloride, USP, cns., 25 to 100 oz. lots	oz. 5.00	5.00
Sulfate, cns	oz. 7.10	7.10
Paprika, Spanish, bgs.	lb. .42	.36
p-Aminophenol, dms., frt. alld.	lb. .97	.97

Para-aminophenol (see p-Aminophenol).
Para-anisidine (see p-Anisidine).
Parachloroaniline (see p-Chloroaniline).

Paraffin, crude, scale, white, 121-123° F. ASTM, solid, c.l., ref'y.	lb. .0660	.0710
fully ref'd, slabs, 122-124° F. ASTM, loose, c.l., ref'y.	lb. .0845	.0845
125-127° F. ASTM, loose, c.l., ref'y.	lb. .0845	.0845
130-132° F. ASTM, loose, c.l., ref'y.	lb. .0855	.0855
132-134° F. ASTM, loose, c.l., ref'y.	lb. .0855	.0855
135-137° F. ACTM, loose, c.l., ref'y.	lb. .0855	.0855

Paraffin prices in bgs. and ctns., 7 10c. per lb. higher; 1,000 to 9,999 lbs., 2.7c. per lb. higher, and under 1,000 lbs., 3.7c. per lb. higher.

Paraformaldehyde, tech., 91%, flake, bgs., c.l., frt. alld.	lb. .12	.0965
powd., bgs., c.l., frt. alld.	lb. .15½	.15⅛
USP, X, fib. dms., c.l.	lb. .198	.183
Paraldehyde, tech., 98%, tanks, works	lb. .12	.11½
Parathion, spray powder, 15%, dealers, tins	lb. .45	.45
tech., dms., works	lb. 1.62	1.339
Paris green, dealer, distributor, dms., kgs., c.l., works, frt. alld. on 96 lbs. or over	lb. .36	.36
Passion flower herb, bls	lb. .20	.20
Peanut meal, 45%, O.P., mills,	ton. 73.00	84.00N
Pectin, citrous, NF, powd., bbls.	lb. 2.05	2.05
tech., powd., bbls	lb. 1.50	1.50
Penicillin, crystalline, potassium, sterile, bulk, 1,000,000 units.	.08½	.07½
Procaine, bulk, 1,000,000 units.	.08½	.07½
Sodium, sterile, bulk, 1,000,000 units.	.08½	.07½
Pentachlorophenol, dms., c.l., works, frt. alld.	lb. .21	.21
Pentarythritol, tech., bgs., c.l., works	lb. .34	.32
Pentane, industrial, tanks, group 3.	gal. .12	.14½
Pepper, black, Malabar, spot, bgs.	lb. 1.03	.44
Red, Gondar, bgs	lb. .28	.28
Japanese, hontakas, bgs., afloat	lb. .40	.35
birdseye, bgs	lb. .56	.60
Mombassa, bgs	lb. .55N	.22
Nigerian, bgs	lb. .32	NP
Turkish, bgs	lb. .28	.22
Zanzibar, bgs.	lb. .55N	.NP
White, bgs	lb. 1.05	.62
Peppermint leaves, USP, bls.,	lb. .70	.70
imported, bls	lb. 1.25N	1.25
Pepsin, NF, 1: 3,000 bulk	lb. 3.75	3.45
Perchloroethylene, tanks, dlvd. E.	lb. .11	.10¾
Peru Balsam, dms	lb. 1.25	1.50
Petrolatum, amber, tanks, ref'y.	lb. .03¼	.03¼
cream, tanks, refy	lb. .04⅜	.04⅜
extra, amber, tanks, ref'y	lb. .03½	.03½
USP, white, lily, tanks, ref'y.	lb. .04⅝	.04⅝
snow, tanks, ref'y	lb. .05⅜	.05⅜
soft, tanks, ref'y	lb. .05	.05
yellow, soft, tanks, ref'y	lb. .03½	.03½
Petroleum, lacquer, diluent, California, 150°-240° F b.r., tanks, ex tax, f.o.b. Los Angeles	gal. .183	.169
East coast, tanks, N. J. and N. Y. refy.	gal. .18	.19
Group 3, benzol-type, tanks, refy.	gal. .14125	.14125
toluol-type, tanks, refy.	gal. .13125	.13125
Mineral spirits, regular, California, tanks, ex-tax, f.o.b. San Francisco	gal. .174	.164
East coast, tanks, N. J., N. Y., refy.	gal. .18	.17
Group 3, tanks	gal. .11875	.11875



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PSI

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Petroleum, Mineral Spirits, Boston—Potassium Metabisulfite

	1954	1955
Pttroleum, mineral spirits, tankwagon, Boston gal.	.19	.19
Buffalo gal.	.195	.195
Chicago gal.	.279	.279
Cleveland gal.	.22	.22
Newark gal.	.18	.18
New York gal.	.18	.18
Philadelphia gal.	.185	.185
Pittsburgh gal.	.18	.18
Providence gal.	.195	.195
specially refd., tanks, refy., Watson, Calif gal.	.244	.245
Borger, Tex gal.	.24	.24
Houston, Tex gal.	.24	.24
Wood River, Ill gal.	.2625	.2625
dlvd. N. J. gal.	.32	.32
N. Y. gal.	.33½	.33½
tankwagon, dvld. N. J. gal.	.37	.36
N. Y. gal.	.37	.37
Naphtha, cleaners, East coast, tanks, N. J., N. Y. refy. gal.	.17	.17
Group 3, tanks gal.	.12875	.12875
tankwagon, Newark gal.	.18	.18
New York gal.	.18	.18
Philadelphia gal.	.17	.185
V.M.&P., 225°-300° F., b.r., tanks,, West coast, Los Angeles gal.	.168	.169
Portland, Ore. gal.	.174	.175
San Francisco gal.	.173	.174
Seattle, Wash gal.	.174	.175
East coast, N. J., N. Y., tanks gal.	.18	.18
Group 3, tanks gal.	.12875	.12875
Petroleum, naphtha, VM&P, tankwagon, Boston bal.	.205	.205
Chicago gal.	.289	.289
Cleveland gal.	.23	.23
Newark gal.	.195	.195
New York gal.	.195	.195
Philadelphia gal.	.195	.20
Pittsburgh gal.	.19	.19
Solvent, partial aromatic, tanks, East coast, N. J., N. Y., 205°-284° F. b.r., 38°-43° C. m.a.p. gal.	.26	.24
19°-30° C. m.a.p. gal.	—	.19
272°-387° b.r., 31° C. m.a.p. gal.	.29	.29
27°-28° C. m.a.p. gal.	.29	.32
19° C. m.a.p. gal.	.34	.32
310°-392° F. b.r., 30°-38° C. m.a.p. gal.	.27	.27
17°-19° C. m.a.p. gal.	.35	.35
350°-425° F. b.r., 32°-34°C. m.a.p. gal.	.30½	.30
25° C. m.a.p. gal.	.39½	.39
18°-21° C. m.a.p. gal.	.35	.35
rubber, California, tanks, ex tax, San Francisco, gal.	.173	.173
East coast, N. J., N. Y., tanks gal.	.18	.18
Group 3, tanks gal.	.11875	.12875
Stoddard, tanks, East coast, N. J., N. Y. gal.	.17	.17
Group 3 gal.	.12375	.12375
Pennsylvania, western gal.	.15	.16
tankwagon, Boston gal.	.19	.19
Chicago gal.	.289	.289
Cleveland gal.	.22	.22
Petroleum, solvent, stoddard, tankwagon, Los Angeles, ex tax gal.	.173	.194
Newark gal.	.18	.18
New York gal.	.18	.18
Philadelphia gal.	.165	.185
Pittsburgh gal.	.18	.18
Sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works lb.	—	.16
tanks, works lb.	.14	.14
50-55½ sulfonic content, non-ret. dms., c.l., works lb.	—	.15½
tanks, works lb.	.12½	.12½
o-Phenetidine, dms., works lb.	1.00	1.00
p-Phenetidine, dms., works lb.	1.00	1.00
Phenobarbital, USP, dms., 100-lb. lots lb.	4.00	4.00
Phenobarbital-sodium, USP, dms., lb.	4.00	4.00
Phenol, 90-92% (cresol, 8-10%), tanks, frt. alld. E. of Rockies lb.	.14	.14
82-84% (cresol, 16-18%), tanks, same basis lb.	.13½	.13½
39° or above, tar distilled, tanks, same basis lb.	.15½	.15½
USP, synthetic, tanks lb.	.16	.16
Phenolphthalein, USP, or yellow, bbls., dms., 2,000-lb. lots, lb.	1.10	1.10
Phenothiazin, NF, fib. dms., c.l., frt. adjusted lb.	.53	.45
Phenyl acetate, dms., 100-lb. lots, works lb.	.50	.50
Phenylacetaldehyde solution, 50%, bots. lb.	2.40	2.40
100%, bots. lb.	4.00	4.00
Phenylacetamide, 125-lb. dms. lb.	1.10	1.10
Phenylalanine, dextro-laevo, dms., works lb.	27.00	27.00
m-Phenylenediamine, dms., frt. alld lb.	.90	.90
p-Phenylenediamine, redist., dms., works lb.	2.00	2.00
tech., ref'd., dms., same basis lb.	1.10	1.10
Phenylcarbethoxy pyrazolone, 250-lb. fib. dms., dlvd. E. lb.	3.60	3.60
1-Phenyl-3-methyl pyrazolone-5, 250-lb. dms., dlvd lb.	1.70	1.70
Phenyldiethanolamine, dms., c.l., frt. alld lb.	.40	.40
Phenylethanolamine, dms., c.l., works lb.	.69½	.69½
m-Phenylenediamine, dms., frt. alld. lb.	.90	.90
p-Phenylphenol, bgs., c.l., works lb.	.37½	.35
Phenylethyl acetate, dms. lb.	1.35	1.35
b-Phenylethylamine, dms., works, 1,000-lb. lots lb.	1.25	1.10
b-Phenylethylamine, dms., 1,000-lb. lots, works lb.	1.10	1.10
Phenylethylphenyl acetate, bots. lb.	3.95	3.95
Phenylhydrazin base, CP, bots. lb.	3.00	3.00
Hydrochloride, com'l, kgs., works lb.	1.75	1.75
purified, bots. lb.	5.17	5.17
o-Phenylphenol, dms., l.c.l., works lb.	.20	.42
Phloroglucinol, com'l, fib. dms., works lb.	6.40	6.40
CP, bots., fib. dms., works lb.	17.00	17.00
tech., fib. dms., works lb.	10.45	10.45
Phosgene, 150-lb. cyls., werks.lb.	.27½	.27½
Phosphate, defluorinated (see under D), Rock, Curacao, Atlantic ports, New Orleans ton.	45.00	43.00
Flordia, land pebble, run-of-mine, washed, dried unground, bulk, c.l., mines, 68-66%, b.p.l., bulk, c.l., mines long ton.	4.58½	4.60
70-68%, b.p.l., c.l., same basis long-ton.	4.68½	5.00
72-70%, b.p.l., c.l., same basis long-ton.	5.68½	5.65
75-74%, b.p.l., c.l., same basis long-ton.	6.68½	6.65
78-76%, b.p.l., c.l., same basis long-ton.	7.68½	7.65

The above prices are based on fuel oil at $2.15 per bbl. and labor at $1.28. The 3c. labor advance and 9c. fuel oil advance currently absorbed.

Phosphorus, red, amorphus, dms. lb.	.46	.43
yellow, dms., c.l. lb.	.48	.20
Oxychloride, tankcars, works, lb.	.13	.14
Pentasulphide, solid, dms., c.l., works lb.	.11½	.11½
Pentoxide, dms., c.l., works.lb.	.11½	.13½
Sesquisulphide, export, dms.lb.	.31	.31
Trichloride, tankcars, works.lb.	.14	.14
Phthalic anhydride, tanks, works, frt. equald. lb.	.19½	.19½
Phthalimide, 97-98%, works, frt. alld. lb.	.65	.65
Phthalylsulphacetamide, fib. dms. lb.	5.00	5.00
a-Picoline, ret. dms., c.l., works, frt. equald. lb.	.43½	.43½
g-Picoline, 98%, dms., c.l., works lb.	2.65	2.65
b,g-Picoline, 5%, dms., c.l., works. lb.	.31	.32½
Pilocarpine hydrochloride, NF. bots., USP oz.	5.25	5.25
Nitrate, USP, bots., vials oz.	5.10	5.10
Pimento, Guatemala, bgs. lb.	.20N	NS
Jamaica, bgs. lb.	.34	.90
Mexican, bgs. lb.	.26	.90
Pinkroot, bls. lb.	3.00	3.00
Piperazine, hexahydrate, French Codex, bots. kilo.	9.00	8.00
Piperidine, 98%, dms., frt. equald. lb.	2.90	2.90
Piperonyl butoxide, dms., dlvd., E. lb.	4.50	4.50
Cyclenene, dms., dlvd. E lb.	4.20	4.20
Pitch, coaltar, 150°-170°F., m.p., tanks, works ton.	—	35.00
Cottonseed, dms., works lb.	.02¼	.02¼
Soybean, dms., works lb.	.05	.05
Platinum metal, works oz.	93.00	82.00
Fleurisy root, bls. lb.	.45	.45
Podophyllin resin, NF, dms. lb.	8.75	11.95
Pokeroot, bls. lb.	.19	.19
Poloxyethylene sorbitan monostearate, 20,000 lb. lots, works lb.	.43	.41
tristearate, dms., 20,000 lb. lots, works lb.	.43	.43
Poppy seed, Dutch, bgs. lb.	.17¾	.31¼
Polish, bgs. lb.	.17¾	.32
Turkish, bgs. lb.	.17¼	.26
Potash, caustic, reg., flake, 88-92%, dms., c.l., works 100 lbs.	8.50	9.15
liq., 45%, tanks, same basis 100 lbs.	3.875	4.25
solid, 88-92%, dms., c.l., works 100 lbs.	7.90	8.70
Potassium acetate, NF, dms lb.	.31	.31
Bicarbonate, USP, gran., dms. lb.	.22	.22
powd., dms. lb.	.75	.24
Bichromate, bgs., c.l., works. lb.	.15	.15
Bitartrate, dom., NF, gran. or powd., bbls., 5,000 lbs. one ship't lb.	.32½	.33½
imp., kgs. lb.	.24	.25¾
Bromate, bbls., 1,000 lbs. or more lb.	.50	.50
Bromide, USP, gran., bbls., kgs. lb.	.34	.34
Carbonate, tech., calcined, bbls., c.l., works, 100 lb.	9.00	3.00
hydrated, 83-85%, bbls., c.l., works 100 lbs.	7.60	7.60
USP, gran., bbls., dms. lb.	.16½	.16½
powd., bbls., dms. lb.	.21	.21
Chlorate, cryst., dms., c.l., works lb.	.10¼	.10¼
export, dms., 1 to 10 tons, works lb.	.12¾	.12¾
powd., dms., c.l., works. lb.	.10¾	.10¾
NF, gran., dms. lb.	.31	.32
Chloride, USP, cryst., dms. lb.	.21	.21
gran, dms. lb.	.15	.15
powd., dms. lb.	.24	.24
Chromate, tech., bgs. lb.	.50	.50
Citrate, USP, gran., dms. lb.	.41	.41
powd., dms. lb.	.40½	.40½
Ferricyanide, kgs. lb.	.60	.60
Ferrocyanide, dms. lb.	.22½	.22½
Fluoborate, fib. dms., c.l., works. lb.	.30	.30
Fluoride, dms., works. lb.	.24	.32
Gluconate, dms. lb.	.75	.75
Glycerophosphate, 75% soln., cbys lb.	2.15	2.15
Guaiacolsulfonate, NF, dms. lb.	2.10	2.10
Hydroxide, USP, pellets, 100-lb. dms., 1 to 100 dms lb.	.28½	.28½
Hypophosphite, NF, fib. dms., ton lots or less lb.	1.00	1.00
Iodide, dms. lb.	2.15	1.90
Manure salt, 22% K_2O, bulk, mines unit-ton.	.21	.19
Metabisulfite, gran., dms. lb.	.21	.20
powd., dms. lb.	.25	.25

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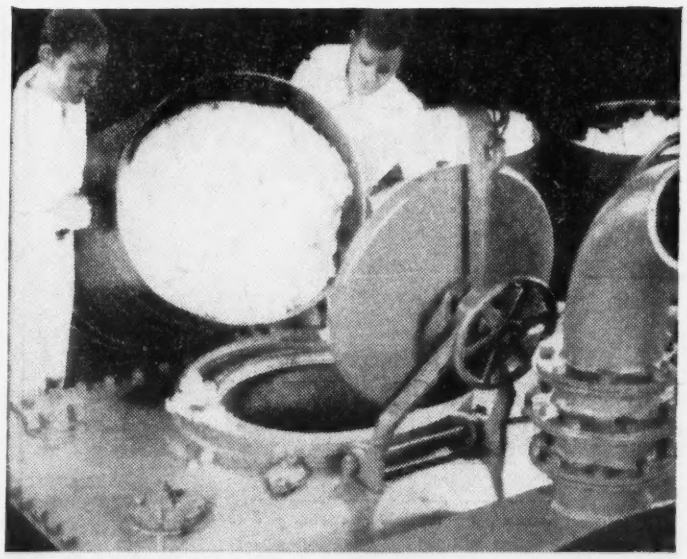
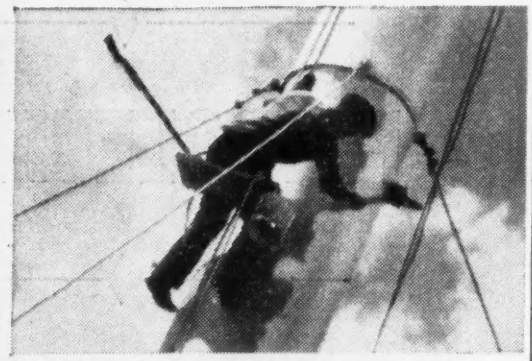
IN PETROLEUM (*Motor Oil and Gasoline Additives*)



IN CHEMICALS (*Plastics*)



IN SURFACE COATINGS (*Paint and Varnish*)

PETROLEUM	SURFACE COATING	CHEMICAL
PARANOX	PETROHOL 91	PETROHOL 91
PARATONE	PETROHOL 95	PETROHOL 95
PARAFLOW	PETROHOL 99	PETROHOL 99
PARAPOID	JAYSOL	JAYSOL
PARADYNE	Secondary Butyl Alcohol	Iso-Octyl Alcohol
PARATAC	Secondary Butyl Acetate	Decyl Alcohol
PETROHOL	Isopropyl Acetate	Denatured Ethyl Alcohol
Methyl Ethyl Ketone	Acetone	Tridecyl Alcohol
Dewaxing Aid	Methyl Ethyl Ketone	Dicyclopentadiene
Ethyl Ether	Dicyclopentadiene	Isoprene
Isopropyl Ether	Ethyl Ether	Butadiene
Reference Fuels	Isopropyl Ether	Ethyl Ether
	Naphthenic Acids	Isopropyl Ether
	Iso-Octyl Alcohol	Tetrapropylene
	Decyl Alcohol	Tripropylene
	Denatured Ethyl Alcohol	Aromatic Tars
		Benzene
		Acetone
		Methyl Ethyl Ketone

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	1954	1955
Potassium muriate, dom., 50-60% K.O, bulk, Carlsbad, N. M. unit-ton.	.43	.39½
50-51%, K.O, paper bgs., Carlsbad, N. M. ton.	25.75	24.50
Oxalate, neutral, tech., fine gran., bbls., dms lb.	.30	.30
Pentaborate, gran., bgs., c.l., works ton.	184.00	189.00
Perchlorate, dms., c.l., works, lb.	.15	.15
Permanganate, tech., dms., works lb.	.22½	.22½
USP, dms., works lb.	.24¾	.24¾
Persulfate, dms., c.l., works, lb.	.18	.18
Phosphate, tetrabasic, bbls., works lb.	.16½	.16½
Prussiate, red (see Potassium ferricyanide).		
yellow, (See Potassium ferrocyanide).		
Silicate, glass, bgs., c.l., works, so'n clarified 29°, Be. 1:25, tanks, works 100 lbs.	5.80	5.80
tech., 29°, Be. 1:25, tanks works 100 lbs.	5.35	5.35
40.5°, Be. 1:20, tanks, works 100 lbs.	6.45	6.45
Silicofluoride, bbls., works lb.	.09	.09
Stannate, dms., frt. alld. E lb.	.647	.658
Sulfate, agricultural, 90-95% K_2SO_4, bulk, works, basis 90% ton.	37.25	35.00
NF, VII cryst., bbls lb.	.31	.31
gran, dms lb.	.18½	.18½
powd., dms lb.	.16½	.16½
Thiocyanate, NF, cryst., dms., 100-lb. lots or less lb.	.85	.84
tech., works lb.	.77	.77
Titanate, cns., c.l., works lb.	.14	.14
Potassium-magnesium sulfate, bulk, min., 40% K_2SO_4, 13-50% MgO, works ton.	16.00	15.05
Potassium-titanium, fluoride, fib, dms., works lb.	.39	.39
Oxalate, bbls., dms lb.	.85	.85
Potassium-zirconium fluoride, fib, dms., c.l., works lb.	.50	.50
Pregnenolone, bots gram.	.75	.60
Acetate, bots gram.	.70	.55
Procaine hydrochloride, USP, dms., frt. alld lb.	3.10	2.90
Progesterone, USP, 100 grams, bots gram.	.79	.79
Propane, indust., tanks, group 3 gal.	.04	.03½
n Propyl acetate, tanks, dlvd lb.	.1075	.1075
Gallate, dms., 100 to 2,000-lb. lots, works lb.	3.90	3.90
p-Hydroxybenzoate, USP, dms. lb.	2.30	2.30
Propylene dichloride, tanks, dlvd. E lb.	.07	.07
Glycol, indust., tanks, dlvd. E. lb.	.14½	.13
USP, tanks, same basis lb.	.15½	.15
Methylether, tanks, same basis lb.	.18½	.18½
Oxide, tanks, dlvd. E lb.	.17½	.17½
Propylthiouracil, bots., 50-kilo lots or more kilo.	.55	.55
Psyllium seed, black, bgs lb.	.80	.80
blonde, bgs. lb.	.20	.18
husks, bgs. lb.	.48	.45
Pumice, dom., grd., coarse, O, ½, 1, 1½, 2, 3, bgs., ton lots, lb.	.03⅜-	.03⅜
imp., Italian silk-screen, coarse, bgs., ton lots lb.	.06½	.06½
fine, bgs., ton lots lb.	.04	.04
sun dried, coarse, bgs., ton lots lb.	.02½	.02½
fine, bgs., ton lots lb.	.02½	.02½
Pyrethrum flowers, fine-grd., 0.9% pyrethrins, bbls., works, lb.	.50	.45
powd., 1.3% pyrethrins, bbls., works lb.	.71½	.65
liq. (20 to 1), basis 2 grams pyrethrins per 100 cc., odorless base, dms., works gal.	8.35	8.35
oleoresin, dewaxed, 20% dms., works lb.	10.00	10.00
Pyridine, denaturing, dms., works and frt. equald gal.	2.77	2.77
refd., 2°, non-ref., dms., l.c.l., same basis lb.	.95	.75
Pyridoxine hydrochloride, 100-gram bots gram.	.55	.55
Pyrites, Canadian, works, long-ton.	3.00	3.00
Pyrogallol (see Catechol).		
Pyroxylin, scrap, ungrd., amber, cs., works lb.	.20	.20
black, cs., works lb.	.12	.12
mixed, mottled, cs., works, lb.	.11	.13
mixed colors, dms., works lb.	.11	.11
white, china, ivory, cs., works lb.	.15	.16
dense, cs., works lb.	.12	.12
translucent pastels, cs., works, lb.	.14	.14
transparent, colorless, cs., works lb.	.20	.25
colors, cs., works lb.	.14	.15
shavings, opaque, amber, cs., works lb.	.11	NS

Q

Quebracho extract, clarified, grd., 70% tannin, bgs., c.l. lb.	.16½	.16½
liq., 35% tannin, tanks, same basis lb.	.08¼	.08¼
solid, clarified, 64% tannin, bgs., c.l., ex dock, duty extra lb.	.12⅞	.12 23/64
ordinary, 63% tannin, bgs., c.l., same basis lb.	.11 31/64	.11 21/32
Quercitron extract crystals, No. 1 bbls., l.c.l lb.	.40	.40
liquid, No. 1, bbls., c.l lb.	.19	.19
Quicksilver (see Mercury metal).		
Quince seed bgs lb.	1.50N	2.00N
Quinidine, NF, V, cryst., cns., 100-oz. lots oz.	1.15	1.15
powd., precip., cns., 100-oz. lots oz.	1.17	1.17
Sulphate, USP, cns., 100-oz. lots, oz.	.87	.87
Quinine, NF, cns., 100-oz. lots, oz.	.54	.54
Bisulphate, USP, cns., 100-oz. lots oz.	.37½	.37½
Dihydrochloride, USP, cns oz.	.54	.54
Ethylcarbonate, NF, cns., 100-oz. lots oz.	.63½	.63½
Hydrobromide, NF, cns., 50-oz. lots oz.	.47½	.47½
Hydrochloride, USP, cns., 100-oz lots oz.	.47½	.47½
Phosphate, NF, cns., 100-oz. lots oz.	.61	.61
Salicylate, NF, cns., 100-oz. lots, oz.	.55	.55
Sulphate, USP, cns., 100-oz. lots, oz.	.42	.42
Quinine and Urea hydrochloride, NF, cns oz.	.56	.56
Quinoline, tanks, frt. equald lb.	.50	.50

R

	1954	1955
R salt, paste, basis, 100% dms., frt. alld lb.	.83	.83
powd., basis 100%, frt. alld. lb.	.88	.88
Rauwolfia serpentina root, powd., bbls., dms lb.	2.00	2.00
Red, BON acid maroons, pure, bbls lb.	1.75	1.75
resinated, bbls lb.	1.50	1.50
arylid, deep shades, bbls lb.	3.60	3.60
light shades, bbls lb.	2.75	2.75
maroons, pure, bbls. lb.	3.60	3.60
Cadmium, CP, dark shade, bbls., frt. alld. E. of Rockies, lb.	4.30	4.30
light shade, bbls., same basis lb.	4.00	4.00
medium shade, bbls., same basis lb.	4.25	4.25
medium-light shade, bbls., same basis lb.	4.05	4.05
orange shade, bbls., same basis lb.	NP	3.95
Lithopone, deep shade, bbls., same basis lb.	1.93	1.93
light shade, bbls., same basis lb.	1.70	1.70
maroon shade, bbls., same basis lb.	2.05	2.05
medium shade, bbls., same basis lb.	1.85	1.85
medium-light shade, bbls., same basis lb.	1.77	1.77
orange-red shade, bbls., same basis lb.	1.64	1.64

Red cadmium lithopone, all shades, in smaller pkgs., 5c. per lb. higher; all prices are 1c. per lb. higher ex whse., Los Angeles and San Francisco.

	1954	1955
Red, eosin toner, bbls., works. lb.	1.60	1.60
Indian, dom., pure, bgs., Bethlehem, Easton, E. St. Louis, N. Y lb.	.12¾	.12¾
Iron oxide, pure, 93% ferric oxide, bgs., c.l., works lb.	.12¾	.12¾
nat., 75-85% ferric oxide, bgs., l.c.l., Bethlehem, Pa.; Copley, O.; Easton, Pa., E. St. Louis lb.	.08	.06
Lake C toner, alizarin, bbls., works lb.	1.10	1.10
Lithol toner, bbls., works lb.	.79	.79
rubin toner, pure, bbls., works lb.	1.50	1.50
resinated, bbls., works lb.	1.40	1.40
Virginia-type, bbls., works. lb.	1.40	1.40
Maroon toner, MNPT, kegs, works lb.	3.60	3.60
Metallic, bbls., c.l., works lb.	.02½	.02½
Oxide, Persian gulf, bgs., c.l. works lb.	.06¾	.06¾
Para toner, bbls lb.	.93	.95
Chlorinated, kgs. lb.	1.10	1.10
Rhodamine, molybdated, PMA, kegs lb.	5.35	5.35
tungstated, PTMA, works, kegs lb.	6.15	5.95
Spanish oxide, bbls., c.l., ex dock lb.	.05¾	.05¾
Toluidin toner, deep shades, kgs., works lb.	1.50	1.60
light shades, kgs., works lb.	1.50	1.60
Turkey, bbls., works lb.	.16	.62
Tuscan, bbls., frt. equald lb.	.24½	.24½

	1954	1955
Red, Venetian, 15%, bgs., works. lb.	.0350	.0350
20%, bgs., works lb.	.0475	.0475
25%, bgs., works lb.	.0525	.0525
30%, bgs., works lb.	.0550	.0550
35%, bgs., works lb.	.0575	.0575
50%, bgs., works lb.	.0625	.0625
Vermilion, Amer., bbls lb.	.32	.32
Watchung type, bbls lb.	1.95	1.95
Red, precipitate (see Mercuric oxide, red).		
Red saunders, NF, powd., bbls. lb.	.35	.40
Resorcinol, tech., grade, dms., works lb.	.77½	.77½
USP, cryst., dms., works lb.	2.75	2.75
powd., dms., works lb.	2.95	2.95
Monoacetate, NF, dms lb.	3.25	3.00
Rhodinol 5-lb. cns lb.	25.00	25.50
Rhubarb root, China, whole cs. lb.	.75	.75
powdered, bbls lb.	.90	.90
India, whole bgs lb.	.35	.35
powdered, bbls. lb.	.43	.43
Riboflavin, USP, bots. dlvd. kilo.	100.00	100.00
readily soluble, bots. dlvd. kilo.	100.00	130.00
Rochelle salt, (See Potassium-sodium tartrate.)		
Rotenone, CP, bbls., works lb.	20.00	20.00
tech., bb's, works lb.	16.00	16.00
Rottenstone, bgs., 5-ton lots, ex-whse lb.	.03	.03
Rutin, NF, fib. dms., 25 kilo. lots kilo.	25.00	17.50
Ryania, 100% powd., bgs., works. lb.	.20	.20

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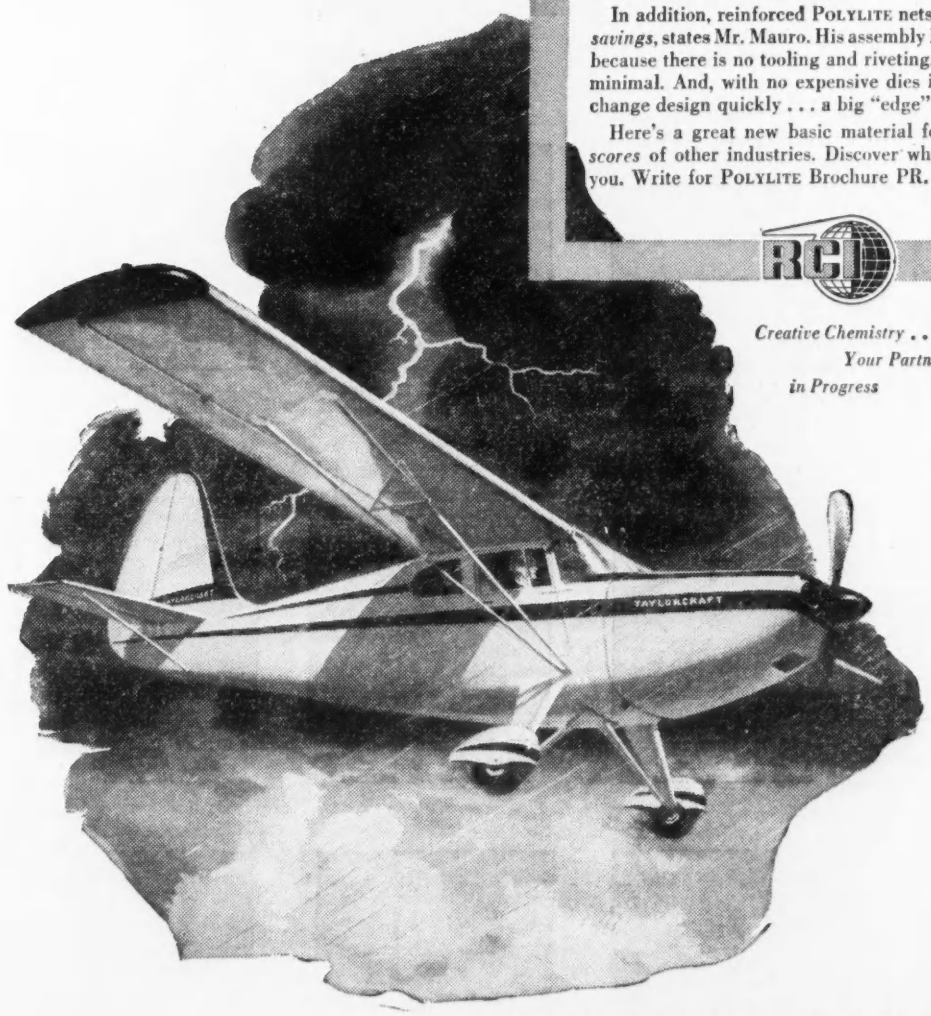

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Sabadilla Seed—Triethylenetetramine

S

		1954	1955
Sabadilla seed, powd., bbls.	lb.	.49	.49
activated, ground with lime, bbls	lb.	.35	.30
Saccharin, USP, gran., soluble, 1,000-lb. lots	lb.	1.60	1.60
powd., soluble, insoluble, dms., 1,000-lb. lots	lb.	1.65	1.65
Saffron, Spanish, USP, tins	lb.	25.00	28.00
Safrol, dms	lb.	.85	1.25
Sage, Cretan, bls	lb.	.11	.11
Dalmatian, bls	lb.	.43	.40
Italian, Officinalis, bls	lb.	.15½	.14
Sago flour, raw, bgs	lb.	.07¼	.06½
refd., bgs	lb.	.08¾	.08¼
Salol, NF, gran., bbls., kgs	lb.	1.10	1.10
Salt, rock, paper bgs., c.l., 100 lbs.		.98	.98
table, vacuum, common, fine, bgs., works, c.l. 100 lbs.		1.12	1.12
Saltcake, dom., bulk, works, basis 100% Na_2SO_4	ton.	19.00	24.00
Saltpeter, (See Potassium nitrate).			
Sandalwood chips, East Indies, bgs	lb.	.65	.65
Sanguinarine nitrate, bots	oz.	4.75	4.75
Sarsaparilla root, dom., bls	lb.	.45	.45
Honduras, bls	lb.	.45	.45
Mexican, bls	lb.	.35	.35
Sassafras root bark, ord., bls	lb.	.45	.45
select, bls	lb.	.60	.65
Schaeffer's salt, paste, dms., frt. alld. 100% basis,	lb.	.85	.95
powder, bgs., frt. alld.	lb.	.95	.95
Scopolamine hydrobromide, bots.	oz.	12.25	12.25
Seidlitz mixture, bbls., 5,000 lbs.	lb.	.30½	.30½
Selenium, powd., dms., dlvd	lb.	4.25	5.00
Senega root, bls	lb.	2.30	3.50
Senna leaf, Alex., half-leaf, b's.	lb.	.19	.19
sifting, bgs	lb.	.17	.17
Tinnevelly, No. 1, bls	lb.	.17	.16
No. 2, bls	lb.	.13	.13
No. 3, bls	lb.	.11	.11
pods, bls., bgs	lb.	.14	.14
Serpentaria root, bls	lb.	4.85	4.25
Sesame seed, Nicaragua, hulled, bgs	lb.	.32	.25
natural, b's	lb.	.17N	.16½
Shellac, bleached, bone-dry, bgs., 1,500-lb. lots	lb.	.49	.60
bbls., 1,500-lb. lots	lb.	.50	.62
kgs., 1,500-lb. lots	lb.	.52	.64
refd., bgs., 1,500-lb. lots	lb.	.59	.68
bbls, 1,500-lb. lots	lb.	.60	.70
k's., 1,500-lb. lots	lb.	.62	.71
Lemon, No. 1, b'gs., 10-bg. lots.	lb.	.40	.60N
No. 2, bgs., 10-bg. lots	lb.	.38	.58N
Superfine, bgs., 10-bg. lots	lb.	.36	.56N
TN, bgs., 10-bg. lots	lb.	.35	.55N
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., Ill., works	ton.	25.00	25.00
hard-quartz, 99½%, 325 mesh, bgs, c.l., works	ton.	20.00	20.00
140 mesh, bgs., c.l., works,	ton.	15.00	15.00
Silicon tetrachloride, tech., dms., c.l., works	lb.	.16	.16
Silver bullion, ingots, cs	oz.	.85¼	.85¼
Cyanide, fib. dms., 2,500-oz. lots	oz.	.77⅜	.77⅜
Nitrate, CP, cryst., bot's., 2,500-oz. lots	oz.	.54¾	.54¾
USP granular silver nitrate 4c. per oz. higher.			
Proteinate, mild, USP, bots., dms., 1,000-oz. lots	oz.	1.05	1.05
strong, NF, bots., dms., 1,000-oz. lots	oz.	1.00	1.00
Soapbark, bls	lb.	.28	NP
crushed, bls., bbls	lb.	.32	NP
powd., bbls	lb.	.35	NP
Soda ash, dense, 58%, bulk, c.l., works	100 lbs.	1.75	1.70
light, 58%, bulk, c.l., works,	100 lbs.	1.65	1.65
Caustic, flake, powd., 76%, c.l., works	100 lbs.	4.10	4.25
liquid, 50%, sellers' tanks, works, dry basis	100 lbs.	2.55	2.70
50%, rayon type, tanks, works, dry basis	100 lbs.	2.63	2.70
70%, sellers' tanks, works, dry basis	100 lbs.	2.65	2.80
solid, 76%, dms., c.l., works,	100 lbs.	3.70	3.80
Sal, bgs., c.l., works	100 lbs.	1.40	1.40
Soda-lime, USP, dms	lb.	.23	23.
Sodium acetate, anhyd., bgs., c.l., works	lb.	.12	.12
NF, gran., dms., works	lb.	.12½	.11
Alginate, refined, bbls., works,	lb.	.83	.83
NF, white, powd., dms., works,	ton lots	lb.	.87	.87
Antimoniate, bbls., c.l., dlvd. E	lb.	.26½	.29
Arsenate, dms., c.l., works	lb.	.13½	.12½
Arsenite, dms., works	lb.	.13½	.13½
soln., dms., works	gal.	.70	.70
Ascorbate, dms., 25-50 kilo lots.	kilo.	21.00	16.00
Benzoate, tech., bbls., dms., 100 lbs. or more	lb.	.39	.39
USP, bbls., dms., 100 lbs or more	lb.	.46	.46
Bicarbonate, USP, gran., b'gs., c.l., works	100 lbs.	2.70	2.70
powd., bgs., c.l., works	100 lbs.	2.30	2.30
Bichromate, bgs., c.l., works,	lb.	.11½	.11½
Bifluoride, bbls., c.l., works, frt. equald	lb.	.17½	.17½
Bisulfate, bulk, c.l., works,	100 lbs.	2.00	2.00
Bisulfite, c.l., works	100 lbs.	4.50	4.50
soln., 35°, bbls., c.l., works,	100 lbs.	1.40	1.40
Bromide, USP, bbls., kgs., works	lb.	.34	.34
Cacodylate, NF, jars, dms	lb.	8.52	6.25
Carbonate, monohydrated, bgs., c.l., works	100 lbs.	2.90	2.90
Chlorate, cryst., dms., c.l., works	lb.	.08¾	.08¾
Chloride, USP, dms	lb.	.05	.05
Chlorite, tech., dms., works.	lb.	.58	.58
Chloroacetate, tech., dms., c.l., works	lb.	.24	.24
Chromate, dms., c.l., works	lb.	.13¼	.13¼
Citrate, anhyd., dms	lb.	.60	.60
USP, VIII, gran., dms	lb.	.26	.26
USP, XIV, gran., dms	lb.	.29½	.29½
Sodium citrate, USP, XIV, powd., prices ½c. higher.			
Cyanate, dms., 1,000-lb. lots, works	lb.	.85	.85
Cyanide, flake, 96-98%, dms., c.l., or 20,000-lb. lots.	lb.	.178	.178
Diacetate, 33-35% acidity, 250-lb. dms., works	lb.	.14	.14
anhd., dms., c.l., works	lb.	.17	.17
Ferrocyanide, 10-ton lots, bgs.	lb.	.13½	.13¼
Fluoride, white, 90%, bbls., c.l., works	lb.	.12½	.12½
Fluoracetate, monobasic, 8-oz. tins, 50 to a case, works	lb.	12.00	12.00
Formate, bgs., c.l., dlvd.	100 lbs.	7.60	7.60
Gentisate, 100-lb. fib. dms	lb.	8.50	8.50
Gluconate, tech., bgs	lb.	.35	.35
refd., dms	lb.	.80	.80
Glutamate, monobasic, dms., c.l.	lb.	1.70	1.55
Glycerophosphate, NF, cryst., bbls.	lb.	2.10	2.10
powder, bbls	lb.	2.15	2.15
solution, 75%, cbys	lb.	1.45	1.45
Hydride, dms., works	lb.	2.00	1.80
Hydrosulfite, dms., c.l., frt. alld	lb.	.23	.20
Hydroxide, NF, pellets, dms.	lb.	.18½	.18½
Hypophosphite, NF, ton lots or less, dms	lb.	.95	.95
Hyposulfite, photo grade, bgs., c.l., works 100 lbs.		4.50	4.50
pea crystals, bgs 100 lbs.		4.50	4.50
gran., bgs., c.l., works, 100 lbs.		4.75	4.75
tech., bgs., c.l., works.	100 lbs.	4.50	4.50
Iodide, USP, dms., bots	lb.	2.80	2.55
Lactate, edible, 50%, dms., cbys. works	lb.	.21½	.21½
60% dms., cbys., works	lb.	.26½	.26½
tech., 50%, dms., cbys., works	lb.	.16½	.16½
Lauryl sulfate, tanks, dlvd	lb.	.23	.20
Metaborate octahydrate, gran., bgs., c.l., works	ton.	78.50	78.50
tetrahydrate, c.l., bbls., works	ton.	199.50	199.50
Metallic, bricks, tanks, works.	lb.	.17	.17
Metanilate, bbls., frt. alld	lb.	.62	.62
Metasilicate, anhyd., bbls., c.l., works 100 lbs.		4.85	5.10
Pentahydrate, dms., c.l., works 100 lbs.		4.80	4.10
Molybdate, crystals, bbls., works	lb.	.75	.70
powd., anhyd., dms., works	lb.	.85	.85
Monohydrate, (see Carbonate monohydrated).			
Naphthionate, bbls	lb.	.70	.70
Nitrate, crude, dom. bulk, c.l., works	ton.	47.00	47.00
imp., bulk, Atl., Gulf, Pac whse	ton.	49.50	47.75
Nitrite, USP, bbls., c.l., works, frt. equald	lb.	.07¾	.08
Orthosilicate, anhyd., dms., c.l., works 100 lbs.		6.00	6.00
hydrated, flake, bbls., c.l., works 100 lbs.		4.75	5.23
Oxalate, neut., bgs., works,	lb.	.1085	.1085
Pentachlorophenate, briquettes, bgs., c.l., works, frt. equald,	lb.	.25½	.25½
pellets, bgs., c.l., same basis	lb.	.25	.25
powd., bgs., c.l., same basis,	lb.	.24	.24
Perborate, USP, tech., bbls., c.l., works	lb.	.193	.193
Peroxide, dms., c.l., dlvd. E. of Miss	lb.	.1860	.1860
Phenosulphonate, gran., dms	lb.	.44	.44
powd., dms	lb.	.47	.47
Phosphate, dibasic, anhyd., bgs., c.l., works 100 lbs.		7.45	7.45
USP, powd., bgs., dms., works	lb.	.19	.19
monobasic, anhyd., bgs., c.l., works 100 lbs.		8.45	8.45
duohydrate, bgs., c.l., works 100 lbs.		7.05	7.05
tribasic, cryst., bgs., c.l., works, frt. equald, 100 lbs.		4.20	4.20
Pyrophosphate, acid, bgs., c.l., works, frt. equald 100 lbs.		10.75	10.75
ferric, dms., 1,500-lb. lots, works	lb.	.31	.31
tetrabasic, anhyd., bgs., c.l., works, frt. equald, 100 lbs.		7.90	7.90
Salicylate, USP, dms	lb.	.68	.68
Sesquicarbonate, bgs., c.l., works 100 lbs.		2.10	2.10
Sequisilicate, hydrated, bgs., c.l., works 100 lbs.		4.90	4.60
Silicate, liquid, 40°, 1:2.3, turbid, tanks, works 100 lbs.		1.00	1.35
47°, turbid, 1:2.9, tanks, works 100 lbs.		1.60	1.95
solid, 1:3.2, works	ton.	57.50	57.50
Silicofluoride, bbls., c.l., works,	lb.	.07	.07
Stannate, dms., works, frt. alld. E	lb.	.478	.526
Sulfanilate, bbls., works	lb.	.22	.22
Sulfate, NF VII, powd., dms.	lb.	.22½	.22½
tech., anhyd., bgs., c.l., works frt. alld. to 810	100 lbs.	2.35	2.50
rayon grade, bgs., c.l., works,	ton.	29.00	29.00
USP, cryst., gran. fib. dms.	lb.	.17½	.17½
Sulfide, flake, bbls., c.l., works E. frt. equald,	lb.	.05¼	.05¼
Sulfite, anhyd., bgs., c.l., works 100 lbs.		3.00	3.00
powd., bbls., c.l., works, 100 lbs.		7.25	7.25
Sulfhydrate, flake, 70-72%, dms., c.l., works	lb.	.03½	.03½
liq., 34-40%, 100% basis, tanks, works	ton.	110.00	110.00
Tetrasulfide, liquid, 40%, dms., c.l., works	lb.	.03½	.03½
Thiocyanate, CP, dms.	lb.	.55	.55
Thiosulfate, NF, cryst., bbls.	lb.	.12½	.12½
Titanate, etns., c.l., works	lb.	.10½	.10½
Trichloroacetate, 90%, 100 lb. dms., c.l., frt. alld. E	lb.	.37½	.37½
Tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs.		8.25	8.05
Trisilicate, powd., 1:32.2, bgs., c.l., works 100 lbs.		8.65	8.65
Tungstate, tech., kgs., dlvd. E.	lb.	2.40	1.80
Sodium - ammonium phosphate, bbls., works, frt. equald,	lb.	.23	.23
Sodium-formaldehyde sulphoxylate, c.l., dms., dlvd	lb.	.23½	.21
Sodium-zirconyl sulphate, fib. dms., 1,000 lbs. or more, works	lb.	.28	.28
Solvent naphtha, coaltar high flash, tanks, works.	gal.	.31	.31
Sorbitan monostearate, fib. dms., 20,000 lbs. works	lb.	.32	.32
Sorbitol, cryst., pellets, dms., c.l., works	lb.	.30	.30
powd., dms., ton lots to 5 tons, works	lb.	.38	.38
solution, com'l, aqueous, tanks, works	lb.	.24½	.24½
aqueous, tanks, works	lb.	.23¼	.23½
Soybean meal, 41% bulk, Decatur	ton.	72.50	68.00
protein, chemically isolated, 40,000 lbs. to 60,000 lbs. dlvd	lb.	.23	.23
mechanically refined, bgs., 40,000 lbs., same basis,	lb.	.0605	.0605
Sparteine sulfate, cns.	oz.	.85	.85
Spruce extract, liq., reg., tanks, works	lb.	.01¾	.01¾
powd., super, bgs., c.l., works	lb.	.05½	.05½
Squill, white, bls.	lb.	.12	.17
powd., bbls., bxs.	lb.	.18	.18
St. John's bread, edible, bls.,	lb.	.13	.13
Stannous chloride, anhyd., dms., works	lb.	.834	.729
Oxide, dms., dlvd. E	lb.	.87	.915
Stannous chloride, anhyd., cms., works	lb.	.89	.775
Hydrous (crystals), dms., works,	lb.	.80½	.73⅜
Sulfate, dms., works	lb.	.833	.895
Starch, corn, pearl, paper, bgs., c.l., N. Y.	100 lbs.	7.14	7.14
powd., paper, bgs., c.l.,	100 lbs.	7.29	7.29
Potato, dom., Idaho, bgs., c.l., works	lb.	.06½	.06¾
Maine, bgs., c.l., works,	lb.	.05¾	.06
Rice, bgs., c.l.	lb.	.16	.15½
Wheat, bgs.	lb.	.0755	.0755
Stavesacre seed, bgs.	lb.	.60	.60
Stomach substance, not USP, fib. dms	lb.	2.95	2.90
Stramonium leaves, bgs.	lb.	.18	.18
Streptomycin, either hydrochloride or sulphate, bulk, gram.		.17	.15
Strontium bromide, NF, cns., dms	lb.	.77	.77
Carbonate, 92%, dms.	lb.	.33	.33
Chromate, bbls., works	lb.	.46	.46
Iodide, jars, 25 lbs.	lb.	3.42	3.42
Nitrate, bbls., cs., works	lb.	.11	.12
Salicylate, NF, dms.	lb.	1.65	1.65
Sulfate, air-floated, 90%, 325 mesh, bbls., works	ton.	56.70	56.70
Strontium-calcium sulfide, phosphorescent, dms., works,	lb.	2.80	2.80
Strophanthin, NF, bots	oz.	25.00	25.00
Strophanthus seed, Kombe, biologically tested, bgs	lb.	3.50	3.50
Strychnine, NF, powd., cns., 100-oz	oz.	1.10	1.10
Phosphate, NF, cns., 100-oz.	oz.	1.14	1.14
Sulfate, USP, powd., cns., 100-oz	oz.	.85	.85
Styrene monomer, polymer grade, 99½%, tanks, frt. equald,	lb.	.21	.21
synthetic rubber grade, tanks, same basis	lb.	—	.18
Stryrolyl acetate, bots	lb.	1.45	1.45
Sucrose, octa-acetate, denat., grade	lb.	.71	.76
Sulfabenzamide, dms., works	lb.	4.00	4.00
Sulfadiazin, USP, microcrystals, dms	lb.	10.60	10.60
powder, dms	lb.	10.25	10.25
Sulfadiazin-sodium, USP, dms.	lb.	11.25	11.25
microcrystals, dms	lb.	10.60	10.60
Sulfaguanidine, USP, dms	lb.	2.50	2.50
Sulfamerazin, USP, microcrystals.	lb.	10.65	10.65
Sulfamerazin-sodium, USP, dms.	lb.	11.25	11.25
Sulfamethazine, microcrystals, dms	lb.	8.90	8.90
powd., dms	lb.	8.50	8.50
Sulfanilamide, USP, 30-80 mesh, dms	lb.	1.40	1.40
microcrystals, dms	lb.	1.70	1.70
powder, dms	lb.	1.30	1.30
Sulfanilamidoquinoxaline, veterinary, dms	lb.	6.50	6.50
Sulfapyridine, NF, powd., bots., tins	lb.	7.00	7.00
Sulfapyridine-sodium, monohydrate, powd., dms	lb.	7.50	7.50
Sulfathiazole, USP, microcrystals, dms	lb.	3.15	3.15
powder, dms	lb.	2.80	2.80
Sulfathiazole-sodium, USP, powd., dms	lb.	3.05	3.05
Sulfur, commercial, flour, bgs., mines	100 lbs.	2.30	2.30
bbls., mines	100 lbs.	3.05	3.05
lump, bgs., mines	100 lbs.	2.29	2.29
bbls., mines	100 lbs.	2.63	2.63
crude, bulk, c.l., mines, contract	long ton.	26.50	26.50
f.o.b. vessels, Gulf ports, export	long ton.	31.00	31.00
domestic and Canada	long ton.	28.00	28.00
refd., flowers, USP, bgs., mines	100 lbs.	4.00	4.00
bbls.	100 lbs.	5.25	5.25
flour, light, bgs., mines,	100 lbs.	3.60	3.60
bbls., mines	100 lbs.	4.50	4.50
lump, bgs., mines	100 lbs.	3.30	3.30
rolls, bgs., mines	100 lbs.	3.85	3.85
bbls., mines	100 lbs.	4.40	4.40
salt block, bgs., mines,	100 lbs.	3.50	3.50
virgin block, bbls., mines	100 lbs.	3.45	3.45
rubbermakers, coml., regular, bgs., mines	100 lbs.	2.40	2.40
bbls., mines	100 lbs.	3.55	3.55
98-100% passing through 325 mesh, bgs., mines,	100 lbs.	2.50	2.50
bbls., mines	100 lbs.	3.65	3.65
refd., bgs., mines	100 lbs.	3.25	3.25
bbls., mines	100 lbs.	4.30	4.30
treated, 2.5% mineral oil, bgs., mines	100 lbs.	2.70	2.70
bbls., mines	100 lbs.	3.85	3.85
10% pine tar, bgs., mines,	100 lbs.	3.90	3.90
Dichloride, tanks, same basis	lb.	.03¾	.03¾
Dioxide, liq., com'l, cyls., works,	lb.	.09	.09
multi-unit cars, works,	lb.	.0535	.0535
tanks, works	lb.	.045	.045
refrigeration, cyls., l.c.l., dlvd	lb.	.24	.24
Monochloride, tanks, same basis	lb.	.03¾	.03¾
Sumac leaf, 28%, grd., bgs., ex dock short-ton.		120.00	125.00
ground, same basis	ton.	120.00	120.00
Superphosphate, run-of-pile, under 22% a.p.a., pulv., bulk, Balto	unit-ton.	.88	.88
triple, 48% or more, a.p.a., pulv., bulk, East Tampa, Fla	unit-ton.	.98	.98

T

		1954	1955
2, 4, 5-T, dms, c.l., works	lb.	1.40	1.25
Isopropyl ester, dms., c.l., works	lb.	1.45	1.30
Talc, dom., ord., grd., Calif., bgs., c.l., works	ton.	32.00	32.00
Vermont, off color grd., c.l., works	ton.	14.00	14.00
fibrous, New York, grd., c.l., bgs., works	ton.	25.00	25.00
95.5%, 325 mesh, bgs., c.l., works	ton.	27.00	27.00
99.95%, micronized, bgs., works	ton.	36.00	36.00
imp., Canadian, grd., bgs., c.l.	ton.	15.25	15.25
Tallow, edible, tanks, dlvd	lb.	.11¾N	.11½
inedible, extra, tanks, dlvd	lb.	.07½	.08½
fancy, bleachable, tanks, dlvd	lb.	.07¾	.08¾
No. 1, tanks, dlvd	lb.	.06¾	.07¾
special, tanks, dlvd	lb.	.07⅛	.08
sulfonated, 25%, dms., l.c.l.,	lb.	.07⅛	.07¾
50%, dms., c.l	lb.	.08½	.09¾
Tankage, animal feeding, 9-11% ammonia, bulk	unit-ton.	6.50	6.00
Chicago	unit-ton.	7.50	6.75
Tapioca flour, Brazilian, high grade, bgs., ex whse	lb.	.14½N	.08½
Tar acid oil, 15-18%, tanks, frt. equald	gal.	.39	.39
25-28%, tanks, frt. equald.	gal.	.46	.46
50-53%, tanks, frt. equald.	lb.	.62½	.62½
Terpine glycol ether, tanks, works.	lb.	.22	.23½
Hydrate, coml., bbls., c.l.	lb.	.24½	.24½
NF, cryst., fib. dms	lb.	.57½	.57½
powd., fib. dms	lb.	.65	.65
a-Terpineol, dms., l.c.l., dlvd. E	lb.	.17	.19
Terpineol, coml., dms., c.l., South.	lb.	.13½	.13½
extra, dms	lb.	.41	.41
prime, dms	lb.	.30	.30
Terpinyl acetate, extra, cns., dms	lb.	.55	.60
prime, cns., dms	lb.	.53	.53
Propionate, dms	lb.	1.73	1.75
p-tert-Amyl phenol, tanks, works.	lb.	.25½	.23¾
p-tert-Butylphenol, bgs., c.l., works	lb.	.27½	.25½
Testosterone, USP, 100 grams,	bots gram.	.79	.79
Propionate, USP, 100 grams,	bots gram.	.79	.79
Tetrachloroethane, dms., works,	lb.	.14½	.14½
Tetrachloroethylene, USP, 55-gal. dms., works	lb.	.20½	.20½
Tetraethyl orthosilicate, dms., works	lb.	.71	.64
Pyrophosphate, 40%, cns., dms., dlvd	lb.	.69	.69
Tetraethylenepentamine, tanks, dlvd. E	lb.	.57½	.56
Thallium metal, dlvd	lb.	10.50	12.50
Sulfate, 99%, bots., dlvd	lb.	12.50	8.00
Theobromine, fib. dms	lb.	3.00	3.75
Salicylate, fib. dms	lb.	4.30	4.05
Sodio salicylate, fib. dms	lb.	2.90	3.35
Theophylline, anhyd. or USP, 100-lb. dms	lb.	3.15	3.65
Thiamine hydrochloride, USP, regular or ampul-type fib. dms	kilo.	135.00	100.00
Mononitrate, USP, fib. dms.	kilo.	135.00	100.00
Thiocarbanalide, dms	lb.	.50	.50
Thiourea, tech., dms., c.l., works.	lb.	.40	.40
Thiorium nitrate, purif., fib. dms., works	lb.	3.50	3.50
dl-Threonine, bots., 1-kilo lots.	kilo.	600.00	450.00
Thyme, French, bgs	lb.	.21	.20
Spanish, bls	lb.	.10	.10
Thymol, fib. dms	lb.	3.00	2.75
Tin chloride (see Stannous chloride, anhydrous).			
crystals (see Stannous chloride, hydrous).			
Metal (Straits)	lb.	.85½	.89⅛
Oxide (see Stannic oxide).			
Sulfate (see Stannous sulfate).			
Tetrachloride, anhyd. (see Stannic chloride, anhydrous).			
Titanium dioxide anatase, chalk-resistant, bgs., c.l., dlvd.	lb.	.22½	.22½
ceramic, bgs., c.l., dlvd	lb.	.22½	.22½
regular, bgs., c.l., dlvd	lb.	.22½	.22½
metallurgical, natural, granular, bgs., c.l., works	ton.	120.00	120.00
rutile, non-chalking, bgs., c.l., dlvd. E	lb.	.24½	.24½
Hydride, cns., works	lb.	7.95	7.95
Pigment, calcium-rutile base, bgs., c.l., dlvd	lb.	.03	.03⅜
Tetrachloride, technical, tank-cars, works	lb.	.44½	.44½
dl-a-Tocopherol, bots	kilo.	225.00	149.65
Acetate, bots.	kilo.	225.00	13.50
m-Toluidine, tanks, works, frt. alld.	lb.	.78	.78
o-Tolidine base, dist., kgs	lb.	1.30	1.30
Tolu balsam, cns., dms	lb.	3.00	4.25
o-Toluidine, tanks, works	lb.	.22	.22
p-Toluidine, flake, bbls., frt. alld.	lb.	.64	.64
solid, bbls., frt. alld	lb.	.60	.60
Toluol, coaltar, industrial and nitration, tanks, works—			
Bethlehem, Pa	gal.	.34	.34
Birmingham dist.	gal.	.32	.32
Chicago district	gal.	.35	.35
Cleveland district	gal.	.31½	.31⅛
Geneva, Utah	gal.	.2-	.2-
Johnstown, Pa	gal.	.32	.32
Lackawanna, N.Y.	gal.	.35	.35
Lone Star, Tex	gal.	.35	.33
Lorain, Ohio	gal.	.33	.33
Minnequa, Colo	gal.	.32	.32
Philadelphia, Pa.	gal.	.35	.34
Pittsburgh dist	gal.	.32	.32
Sparrows Point, Md.	gal.	.34	.34
Terre Haute, Ind.	gal.	.35	.35
Youngstown, Ohio,	gal.	.32½	.32⅛
Petroleum, industrial, 2°, tanks, works, Albany, N. Y.	gal.	.35	.35
Bayonne, N. J.	gal.	.35	.34
Baytown, Tex.	gal.	.33	.33
Chicago, Ill.	gal.	.35	.35
Detroit, Mich.	gal.	.35	.35
Philadelphia, Pa.	gal.	.35	.34
Providence, R.I.	gal.	.35	.35
Wood River, Ill.	gal.	.35	.35
p-Toluenesulphonamide, flake, frt. alld	lb.	.64	.64
powd., bbls., works	lb.	.70	.70
solid, bbls., frt. alld	lb.	.61	.61
2,4-Tolylenediamine, cryst., fib. dms., frt. alld	lb.	.94	.94
Tonka beans, Angostura, cks	lb.	1.65	1.65
Brazilian, Surinam, cs	lb.	1.00	1.00
Totaquine, 100-oz. lots, cns	oz.	.42	.42
Toxaphene, dms., c.l., works	lb.	.17	.17
Triacetin, tanks, dlvd. E. of Rockies	lb.	.37	.37
Tributyl citrate, tech., tanks	lb.	.40½	.40½
Phosphate, tanks, c.l., frt. alld.	lb.	.52	.52
Tributylamine, tanks, c.l., works.	lb.	.74	.65
Trichlorbenzene, tanks, frt. alld.	lb.	.13	.13
Trichloroethane, tanks, works.	lb.	.11½	.11⅛
Trichloroethylene, tanks, works, frt. equald	lb.	.10¼	.10¼
Tricholine citrate, 65%, solut., cbys., works, frt. adjusted.	lb.	1.40	1.40
Tricresyl phosphate, coaltar, tanks, dlvd	lb.	.33	.33
petroleum, tanks, dlvd	lb.	.33	.33
Triethanolamine, tanks, dlvd. E.	lb.	24½	.20
Triethylamine, tanks, frt. alld.	lb.	.43¾	.45
Triethylcitrate, tech., refd., dms., c.l., works	lb.	—	.48
Triethyl phosphate, tanks, works.	lb.	.37	.37
Triethyleneglycol, tanks, dlvd. E. of Rockies	lb.	.21½	.16⅛
Triethylenetetramine, tanks, dlvd. E	lb.	.47	.47

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	1954	1953
Triethylamine, 25-40%, tanks, works, basis 100%, frt. equald. lb.	.33	.33
Tripentaerythritol, bgs., l.c.l., works lb.	.37	.35
Triphenyl phosphate, bbls., c.l., frt. equald lb.	.37	.37
Triphenylguanidine, bbls., works, lb.	.90	.90
Tripropyleneglycol, tanks, frt. alld lb.	.24½	.20¾
Trypsin, pharmaceutical, 1:80, dms., works lb.	5.00	6.25
dl-Tryptophane, fib. ctns., works, kilo.	165.00	165.00
Tungsten metal, powd., 99.9%, dms., works lb.	6.21	4.95
Tyrthricin, USP, bots gram.	.75	.75

U

Urethane, USP, dms lb.	1.50	1.50
Urea, dom., 46% N, bgs., c.l., t.l., dlvd. zone 1 ton.	120.00	120.00
45% N, bgs., c.l. (30 tons), dlvd. zone 1 ton.	142.00	137.00
Zone 2 ton.	154.00	153.00
Zone 1 prices are basis delivered Kan., Neb., N. Dak., Okla., S. Dak., Tex. and E. Zone 2 prices include all states west of Zone 1.		
Urea-ammonia liquor, A and B grades, N basis, Belle, W. Va. ton.	126.50	126.50
C grades, tanks, same basis, ton.	126.50	126.50
37 grade, tanks, same basis ton.	155.50	155.50
Uva ursi leaves, bls. lb.	.12	.12

V

Valerian root, Belgian, NF, bls. lb.	.38	.38
dl-Valine, dms., works lb.	21.00	21.00
Valonia beards, 40-42% tannin, bgs., ex-dock ton.	75.00	56.00
Cups, 28-30% tannin, bgs., ex-dock ton.	56.00	44.00
Extract, powd., bgs., ex-dock, duty extra lb.	.09½	.08
Vanadium pentoxide, tech., dms., works lb.	1.28	1.28
Vanilla beans, Bourbon, tins lb.	7.25	10.50
Mexican, cuts, tins lb.	7.25N	10.25N
whole, tins lb.	7.50	10.50
Tahiti, cs lb.	6.75N	10.25N
Vanillin, ex eugenol, tins, 25 lbs. lb.	6.50	6.50
ex guaiacol, tins, 25 lbs lb.	3.00	3.00
ex lignin, tins, 25 lbs lb.	3.00	3.00
Vinyl acetate monomer, tanks, works lb.	.15½	.16½
n-Butyl ether, normal, tech., tanks, works lb.	.27	.27
Chloride monomer, tanks, frt. equald lb.	—	.10½
Ether, USP, anesthesia, bots., 75cc, hospitals bot.	1.56	1.56
Ethyl ether, tech., tanks, works, lb.	.27	.25
Isobutyl ether, tech., tanks, works lb.	.27	.27
Methyl ether., tanks, works lb.	.27	.20
2-Vinylpyridine, dms., works lb.	1.65	1.40
Viosterol, in alcohol, 1,000,000 D units per gram, bots., 10 billion USP units, 1,000,000 units.	.025	.025
in natural vegetable oil, 400,000 to 1,000,000 D units per gram, bots., lots of 1 billion USP units, 1,000,000 units.	.02	.02
Vitamin A, synthetic, acetate, cryst., beads, 500,000 A units per gram, 1,000,000 units.	.07¼	.07¼
liq., in oil, 1,000,000 A units per gram, 1,000,000 units.	.12	.12
Palmitate, liq., 1,000,000-1,800,000 units per gram, 1,000,000 units.	.12	.12
in oil, 1,000,000 A units per gram 1,000,000 units.	.12	.12
B_{12}, cryst., 1 gram or 5 grams vials gram.	295.00	245.00
oral grade, solids, in containers of 1 or 5 grams of B_{12} activity gram.	225.00	185.00
K_1, 25 gram bots gram.	4.50	4.50

W

Wahoo, root bark, bls lb.	2.30N	2.50N
Warfarin, 0.5%, dms., 50-lb. lots, f.o.b. N. Y. or Chicago lb.	1.95	1.95
Wattle bark, fair average, or E. Afr., bgs., ex dock ton.	100.00	98.00
merchantable, bgs., ex dock, ton.	96.50	94.00
extract, liq., 35% tannin, tanks, works lb.	.09¾	.09¾
solid, E. Afr., 60% tannin, ex dock, duty extra lb.	.10	.09¾
S. Afr., 60% tannin, ex dock, duty extra lb.	.10	.10
Wax, bayberry, bgs lb.	.42N	.42
Bees, crude, African, bgs lb.	.51	.59
Brazilian, bgs lb.	NS	NS
Central American lb.	.54	.70N
refd., bleached, white, bricks, lb.	.68	.72
slabs lb.	.67	.62
yellow, bricks lb.	.58	.62
slabs lb.	.57	.61
Candelilla, crude, bgs lb.	.73	.63
refd., bgs lb.	.75	.66
Carnauba, chalky, bgs., ton lots lb.	.84N	.68N
North Country, No. 2, ton lots lb.	.93N	.84
No. 3, bgs., ton lots lb.	.86	.72
refd., bgs., ton lots lb.	.88	.78
yellow, No. 1, Ceara, bgs., ton lots lb.	1.19	1.03
Parnahyba, bgs., ton lots lb.	—	1.08
Japan, bgs lb.	.24	.48
Microcrystalline, 170-175° m.p., ASTM, penetration 15-20, amber, ctns., 20,000 lbs., group 3, works lb.	.13	.13
black, ctns., 20,000 lbs., same basis lb.	.11½	.11½
white, ctns., 20,000 lbs., same basis lb.	.24	.24
180-185° m.p., ASTM, penetration 7-11, amber, ctns., 20,000 lbs lb.	.16	.16
black, ctns., 20,000 lbs., lb.	.14½	.14½
white, ctns., 20,000 lbs. lb.	.27	.27
190-195° m.p., ASTM, penetration 2-7, amber, ctns., 20,000 lbs., same basis, lb.	.20	.20
black, ctns., 20,000 lbs., same basis lb.	.18	.14½
white, ctns., 20,000 lbs., same basis lb.	.33½	.27
Montan, dom., refined, bgs.		
Montan, dom., refd., bgs lb.	.31	.31
Ouricury, refd., bgs lb.	.85	.93
Wax, sugar cane, refd., dom., works lb.	.73	.65
Spermaceti, blocks, cs lb.	.25½	.25½
cake, cs lb.	.26½	.26½
White pine bark, rossed, bls lb.	.20	.18
White precipitate, USP, powd., dms lb.	5.00	6.55
Whiting (see Calcium Carbonate).		
Wild cherry bark, thin, nat., bls lb.	.15	.18
rossed, bls lb.	.19	.19
Witch hazel leaves, bls lb.	.21	.16
Woodflour, 40 mesh, bulk, c.l., works, E ton.	32.00	32.00
60 mesh, bulk, c.l., same basis, ton.	37.00	37.00
80-100 mesh, bulk, c.l., same basis ton.	45.00	45.00
Wormseed, American, bgs lb.	.30	.20
Levant, bgs lb.	4.25	4.25

X

Xylenol, cryst., 58°-60°C, m.p., dms., l.c.l., works lb.	—	.40
45°-47°C, dms., l.c.l., frt. equald lb.	.215	.215
fractions, over 7° C., b.r., except meta, tanks, same basis gal.	.85	.85
meta fractions, over 7° C., tanks, same basis gal.	.90	.90
Xylidines, mixed, dms lb.	.39	.38
Xylol, coaltar, industrial, tanks, works, Bethlehem, Pa gal.	.35	.34
Birmingham dist gal.	.32	.32
Chicago district gal.	.35	.35
Cleveland district gal.	.35	.35
Geneva, Utah gal.	.27	.27
Johnstown, Pa gal.	.33	.33
Lackawanna, N. Y. gal.	.35	.35
Xylol, coaltar, indust., tanks, works, Lone Star Tex gal.	.35	.33
Lorain, Ohio gal.	.33	.33
Minnequa, Colo gal.	.34	.34
Philadelphia, Pa gal.	.36	.34
Pittsburgh district gal.	.32	.32
Sparrows Point, Md. gal.	.35	.34
Terra Haute, Ind gal.	.35	.35
Youngstown, Ohio gal.	.32½	.32½
Petroleum, indust., 10°, works, Albany, N. Y. gal.	.35	.35
Bayonne, N. J. gal.	.35	.35
Baytown, Tex gal.	.33	.33
Chicago, Ill gal.	.35	.35
Philadelphia, Pa gal.	.35	.35
Providence, R. I. gal.	.35	.35
Wood River, Ill gal.	.35	.35

Y

Yara yara, ens lb.	2.20	2.15
Yeast, brewer's dry, 50 Int'l B units per gram, 100-lb. dms lb.	.47	.47
90 Int'l B units per gram, 100-lb. dms lb.	.52	.52
200 Int'l B units per gram, 100-lb. dms lb.	.56	.56
300 Int'l B units per gram, 100-lb. dms lb.	.60	.60
Yellow, barium, chromate, CP, bgs., l.c.l., dlvd. N. of Tenn. and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island, St. Louis, St. Paul lb.	.35	.35
Yellow, benzidin, AAA, bbls., dlvd. lb.	1.91	2.00
AAOT, bbls lb.	2.15	2.25
lightfast, bbls lb.	NP	3.15
Cadmium, CP, all shades, bbls., frt. alld, E. of Rockies lb.	2.85	2.85
lithopone, all shades, bbls., frt. alld, E. of Rockies, lb.	1.20	1.15
Chrome, CP, bbls., dlvd. N. of Tenn. and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island, St. Louis, St. Paul, contracts lb.	.31	.32
Dlvd. Ala., Fla., Ga., La. (Shreveport), 1¼c. higher; Miss., N. C., S. C., Tenn., Dallas, Tex., 1¼c. higher; Ft. Worth, Tex., 1½c. higher; El Paso, Tex., 2c. higher; Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher dlvd. Pac. Coast; for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.		
Hansa, 10B, bbls., same basis as chrome lb.	2.15	2.15
G, pigment, bbls lb.	1.91	1.91
Iron oxide, natural, French type, bgs., c.l., works lb.	.05¼	.05¼
Peruvian type, bgs., l.c.l. lb.	.033	.033
pure, bgs., c.l., works lb.	.10½	.10½
Mercury oxide, bbls., 1,000 lbs. lb.	4.15	5.58
Ocher (see Yellow iron oxide, natural).		
Zinc (chromate), bbls lb.	.25	.26
Yerba santa leaves, bls lb.	.40	.40
Yohimbine hydrochloride, bots., tins oz.	4.75	4.75

BECCO CHEMICAL DIVISION

Food Machinery and Chemical Corporation

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Buffalo 7, N. Y.

BECCO PEROXYGEN CHEMICALS For Oxidation Bleaching Sterilization Catalytic Reaction

PRODUCT	Active Oxygen (% by wt min)	Assay % by weight minimum	Form	Specific Gravity (20°C.)	Stability	Solubility	Residue
Hydrogen Peroxide H_2O_2 27.5%	12.9	H_2O_2 27.5	clear colorless liquid	1.10	no loss of active oxygen under ordinary conditions	Miscible with H_2O in all proportions	Formula F 0.005%
35%	16.5	H_2O_2 35.0		1.13			
Formula D	16.5	H_2O_2 35.0		1.13			
Special grade for dilution purposes							
Formula F	16.5	H_2O_2 35.0		1.13			
Special grade for food processing							
50%	23.5	H_2O_2 50.0		1.20			
Hydrogen Peroxide 90%	42.3	H_2O_2 90.0	clear colorless liquid	1.39	no loss on storage under ordinary conditions	miscible with H_2O in all proportions. Soluble in many organic media	less than 0.005%
Potassium Persulfate $K_2S_2O_8$	5.9	$K_2S_2O_8$ 94.0	white crystals		no loss of active oxygen over two yrs storage at room temperature	5% in water at 20°C.	
Ammonium Persulfate $(NH_4)_2S_2O_8$	6.6	$(NH_4)_2S_2O_8$ 95.0	white hygroscopic crystals			58% at 0°C. in water	
Sodium Carbonate Peroxide $2Na_2CO_3.3H_2O_2$	14.0	H_2O_2 29.7 (approx.)	white powder			soluble in water	
Sodium Pyrophosphate Peroxide $Na_4P_2O_7.2H_2O_2$	9.0	H_2O_2 19.0 (approx.)	white powder			soluble in water	
Urea Peroxide $CO(NH_2)_2.H_2O_2$	16.0	H_2O_2 34.0 (approx.)	white crystals or tablets			soluble in water and alcohols	
Calcium Peroxide 60% CaO_2	13.3	CaO_2 60.0	white to yellowish powder		no loss of active oxygen at room temp. Decomp. above 150°C.	insoluble in water sol. in acid media	
Magnesium Peroxide MgO_2 15%	4.3	MgO_2 15-25-50	yellowish white powder		no loss of active oxygen at room temp. Decomp. above 100°C.	insoluble in water sol. in acid media	
25%	7.1						
50%	14.2						
Zinc Peroxide 55% ZnO_2	9.0	ZnO_2 55 (approx.)	yellowish white powder		no loss of active oxygen at room temp. Decomp. above 150°C.	insoluble in water soluble in acid media	
Acetyl Peroxide in Dimethyl Phthalate $(CH_3CO)_2O_2$	3.4	$(CH_3CO)_2O_2$ 25.0 Dimeth. Phth. 75.0	crystal clear liquid—strong odor	1.18		soluble in most organic solvents	
Peracetic acid 40% $CH_3.COOOH$	as peracid 8.6	$CH_3 \cdot COOOH$ 40%	colorless liquid—strong odor	1.15		similar to acetic acid	
Sodium Perborate $NaBO_3.4H_2O$	10.0	$NaBO_3.4H_2O$ 96.2%	white crystalline powder		Substantially no loss under ordinary storage conditions		

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L. C. Morris Company
P.O. Box 3218, Station F
1156 Dalon Drive, N.E.
Atlanta 6, Georgia
ATwood 0122

BALTIMORE
J. G. Roger Chemical Co.
3500 Ash St., Baltimore 11, Md.
TUxedo 9-1505

BOSTON
N. S. Wilson & Sons
150 Causeway Street
Boston 14, Massachusetts
CApitol 7-5010

BUFFALO
*Buffalo Solvents & Chemicals Corp.
Box 73, Station B
Buffalo 7, New York
BEdford 1572

CHICAGO
*Central Solvents & Chemicals Co.
2540 W. Flournoy St.
Chicago 12, Illinois
SEeley 3-0505

Warwick Wax Company, Inc.
24 North Racine Ave.
Chicago 7, Illinois
MOnroe 6-9604

CINCINNATI
*Amsco Solvents & Chemicals Co.
4619 Reading Road
Cincinnati 29, Ohio
MElrose 1910

CLEVELAND
*Ohio Solvents & Chemicals Co.
3470 W. 140th St.
Cleveland 11, Ohio
CLearwater 1-3770

DETROIT
*Western Solvents & Chemicals Co.
6472 Selkirk Avenue,
Detroit 11, Michigan
WAlnut 1-6350

FT. WAYNE
*Hoosier Solvents & Chemicals Co.
P.O. Box 147, Nelson Road East
Ft. Wayne 1, Indiana
ANthony 0213

GRAND RAPIDS
*Wolverine Solvents & Chemicals Co.
1500 Century Avenue S.W.
Grand Rapids 9, Michigan
GRand Rapids 5-9111

HOUSTON
*Texas Solvents & Chemicals Co.
8501 Market Street
Houston 15, Texas
ORchard 6683

INDIANAPOLIS
*Hoosier Solvents & Chemicals Co.
1650 Luett Avenue,
Indianapolis 22, Indiana
ATlantic 1361

KANSAS CITY
Thompson-Hayward Chemical Co.
29th & Southwest Boulevard
Kansas City 8, Missouri
TAlbot 2473-4-5-6-7-8

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E. S. Browning Co.
2321 Yates St.,
Los Angeles 22, California
RAymond 3-3374

LOUISVILLE
*Dixie Solvents & Chemicals Company
Dixie Highway at Appleton Lane
Louisville 16, Kentucky
ATwood 5828

MILWAUKEE
*Wisconsin Solvents & Chemicals Corp.
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Milwaukee 14, Wisconsin
GReenfield 6-2630

MONTREAL
**Charles Tennant & Co. (Canada) Ltd.
Canada Cement Building
Montreal 2, Quebec, Canada
PLateau 4811

NEW ORLEANS
*Southern Solvents & Chemicals Corp.
1352 Jefferson Highway
P. O. Box 4067, Carrollton Station
New Orleans 18, Louisiana
TEmple 4666

NEW YORK
Warwick Wax Company, Inc.
10-10 44th Avenue
Long Island City 1, New York
STillwell 6-1100, Ext. 50

PHILADELPHIA
Shamrock Chemicals Corporation
401 North Broad St.
Philadelphia 8, Pennsylvania
MArket 7-0690

PORTLAND
***Van Waters & Rogers, Inc.
3950 N.W. Yeon Avenue
Portland 10, Oregon
CApitol 1721

ST. LOUIS
*Missouri Solvents & Chemicals Co.
419 De Soto Avenue
St. Louis 7, Missouri
GArfield 3495

SAN FRANCISCO
E. S. Browning Co.
1515 Third Street
San Francisco 7, California
DOuglas 2-0631

SEATTLE
***Van Waters & Rogers, Inc.
4000 First Avenue South
Seattle 4, Washington
SEneca 5050

SPOKANE
***Van Waters & Rogers, Inc.
809 N. Washington St.
Spokane, Washington
RIverside 4183

TOLEDO
*Western Solvents & Chemicals Co.
Central Ave. at Reynolds Road
Toledo, Ohio
JOrdan 0761

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**Charles Tennant & Co. (Canada) Ltd.
1303 Yonge St., Toronto 7, Ontario, Canada
WAlnut 2-5103

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WARWICK WAXES

NAME OF WAX	MELTING POINT ASTM D-127-30	PENETRATION 100G/77°/ 5 SEC.	COLOR N P A	ACID NUMBER	SAPONIFICATION VALUE	TYPE
CARDIS* ONE	195-200	1-2	4-5	12-16	55-65	EMULSIFIABLE PETROLEUM WAX
CARDIS* 314	184-189	4-6	4-5	13-16	45-55	EMULSIFIABLE PETROLEUM WAX
CARDIS* 319	180-185	5-7	4-6	18-20	65-70	EMULSIFIABLE PETROLEUM WAX
CARDIS* 320	180-185	5-7	4-5	28-30	75-80	EMULSIFIABLE PETROLEUM WAX
CARDIS* 262	195-200	3-5	BROWN	14-17	40-45	SPECIALLY PROCESSED PETROLEUM WAX
FORTEX	190-200	3-5	2½-3½	0.0	0.0	MICRO-CRYSTALLINE HARD AND PLASTIC
MEKON* B-20 A-20 Y-20	190-195 190-195 190-195	3-5 3-5 3-5	BROWN-BLACK AMBER-6 MAX. YELLOW-3-3½	0.0	0.0	MICRO-CRYSTALLINE HARD AND BRITTLE
POLYMEKON*	200-MIN.	0-3	YELLOW	0.0	0.0	SPECIALLY PROCESSED PETROLEUM WAX
WARCO WAX 180	180-185 180-185	4-7 4-7	WHITE BROWN	0.0	0.0	MICRO-CRYSTALLINE HARD AND BRITTLE
WARCO WAX 150-A	145-155 145-155	15-20 15-20	YELLOW 1-2 BROWN	0.0	0.0	MICRO-CRYSTALLINE PLASTIC
WARCOSINE	150-155	15-20	WHITE	0.0	0.0	MICRO-CRYSTALLINE PLASTIC
PARAFFIN	136-138 ASTM	FULLY REFINED				CRYSTALLINE
CANE WAX 700	169-174	1.0-1.5	BROWN	25-30	70-90	VEGETABLE WAX
CANE WAX 500	171-176	3 MAX.	LIGHT BROWN	25-35	55-70	VEGETABLE WAX
CANE WAX 517	165-170	1 MAX.	BROWN	20-30	65-75	VEGETABLE WAX

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10th Street and 44th Avenue, Long Island City, New York

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Zein—Zirconium Oxychloride

Z

	1954	1953
Zein, bgs., 30,000 lb. lots, works, lb.	.38	.38
Zinc acetate, tech., bbls., dms., works lb.	.27	.27
NF, VIII, dms lb.	.53	.53
Borate, bgs., c.l., dlvd. E lb.	.192	.192
Carbonate, tech., rubbermakers, bgs., c.l., works lb.	.14½	.14½
Chloride, NF, gran., dms lb.	.42	.42
precip., powd., dms lb.	.26	.26
soln., 50% tanks, works, 100 lbs.	5.50	4.85
tech., fused, dms., c.l., works, 100 lbs.	10.85	10.10
gran., fib. dms., c.l., works, 100 lbs.	10.60	10.60
Cyanide, kgs., over 1,000 lbs., works lb.	5.23	5.23
Dust, pigment, bbls., c.l., works, lb.	.13¼	.14¾
Fluoride, bbls., works lb.	.49	.49
Hydrosulfite, dms., c.l., frt. alld lb.	.21½	.21½
Metal, prime western slabs, E. St. Louis lb.	.10	.11½
Naphthenate, liq., 8% Zn., dms., frt. alld lb.	.23½	.24½
10% Zn, dms., frt. alld lb.	.28½	.30
Oxide pigment, American process, lead-free, bgs., c.l., dlvd lb.	.13½	.13½
Zinc oxide pigment, American process, leaded, 35%, bgs., c.l., dlvd lb.	.14	.14¼
50%, bgs., c.l., dlvd., lb.	.14⅛	.14⅜
French process, com'l, green seal, bgs., c.l., dlvd lb.	.15¼	.15¼
red seal, bgs., c.l., shipt, pt., frt. alld., dlvd lb.	.14¾	.14¾
white seal, bgs., c.l., shipt., pt., frt. alld. lb.	.15¾	.15¾
USP, ctns., c.l., dlvd lb.	.16¾	.16¾
Phenolsulfonate, NF, gran., dms lb.	.39	.39
powd., dms lb.	.42	.42
Resinate precip., dms., frt. alld. lb.	.26¾	.29
Silicofluoride, bbls., works lb.	.12	.12
Stearate, tech., USP, ctns., c.l. lb.	.37	.37
Sulfate, cryst., 25½% S⅛n., bgs., c.l., works 100 lbs.	6.55	6.55
powd., 36% Zn, bgs., c.l., frt. alld. 100 lbs.	7.90	7.90
USP, gran., dms lb.	.26	.26
Sulfide, pure, bgs., c.l., dlvd. lb.	.253	.253
Undecylenate, dms. lb.	2.25	2.25
Yellow (see Yellow, Zinc).		
Zinc-ammonium chloride, bgs., c.l., works 100 lbs.	9.65	9.65
Zinc-cadmium sulfide, fluorescent, fib. dms., under 1,000 lbs. works lb.	2.10	2.10
Zinc-formaldehyde, sulfoxalate, basic, dms. lb.	.25½	.25½
Zircon (G) gran., bgs., c.l., works lb.	.03⅛	.03⅛
milled, bgs., c.l., works lb.	.04⅛	.04⅛
Zirconium acetate, 13% soln. ZrO_2, c.l., 30,000 lbs. min., works, works lb.	.23	.23
Zirconium carbonate basic, cake, bbls., works lb.	NP	NP
Hydride, cns., works lb.	7.25	7.25
Nitrate, dms., works lb.	4.50	4.50
Oxide, 98½-99%, white, grd., bbls. or bgs., works lb.	1.50	1.50
lump, electric-fused, bgs., less than 300 lbs., c.l., works lb.	.44	.44
milled, electric-fused, bgs., c.l., works lb.	.59	.59
Oxychloride, cryst., ctns., 5 ton lots, works lb.	.35½	.35½

Heavy Chemicals

—Continued from page 3

of caustic upward by 15 cents per hundred pounds. Conversely, to stimulate demand from the glass industry, dense soda ash was reduced by 5 cents per hundred. Consumers remained active almost until the end of the year.

Rayon-Grade Caustic Cut

In the fourth quarter rayon improved and with it, caustic, but the alkali industry was not satisfied with the rate of movement to the slowly reviving consumer, and, as a result, rayon-grade caustic was discounted to rayon manufacturers by 10 cents per hundred pounds. During the fourth quarter, with the exception of the discount in rayon-grade caustic, producers felt comfortable enough to extend contract prices unchanged until the year's end.

The evils of overproduction plagued hydrochloric acid manufacturers all year. Although output by the Mannheim furnace process declined to some extent, from time to time by-product acid weighed heavy on producers' hands. Heavy stocks caused shading in many areas of the country in an attempt to move excess material, due to the lack of feasible storage facilities. Although contract listings were held unchanged, firm bids for quantity shipment were said to have shaded prices during most of the year.

Demand for hydrochloric in organic synthesis and pulp and paper was good most of the year, but varied as to the fortunes of the rayon, textile bleaching, ceramics, pulp and paper, and other industries. At the end of 1954, producers saw no tightening of the heavy supply position, and it was feared by most that there would be little or no improvement during 1955. Hydrochloric began the year in lengthy supply. By mid-summer, supplies were heavier than previously, particularly in the south and southwest. The situation deteriorated until most of the country was affected. By December 31, some sources surmised that there were only a few isolated areas where shipment costs were prohibitive in which hydrochloric acid was not available in vast quantity.

Situation in Saltcake Detailed

Interestingly enough, saltcake, a by-product of hydrochloric acid manufacture from salt and sulfuric acid, was not in the lengthy position of its neighboring product. There were several factors involved in the reduced manufacture of saltcake during the year. One reason for increasing scarcity was lower rayon production and consequent smaller output of by-product cake. The Mannheim furnace became a less important source of cake due in part to curtailed output of hydrochloric acid owing to heavy supply, and in part to new sources of hydrochloric acid as a by-product of organic synthesis.

Perhaps the most important factor in the tight supply position of saltcake was the strength of demand shown by consuming industries. The synthetic detergent industry entered the market in great strength early in the year, and heavy consumption from that quarter continued all year, resulting in periodic price increases in natural, rayon by-product and Mannheim cake. By April, natural had advanced $1 per ton. In June, producers found it necessary to boost prices another $3 per ton. At the end of 1954, prices ranged from $24 to $26 per ton, again to be advanced $2 per ton on January 1, 1955, by some suppliers.

Chlorine in Comfortable Supply

Due to the good rate of production of alkalies over most of 1954, chlorine produced from the electrolytic cell and the ammonia-soda process was in comfortable supply. Producers' reports all during the year indicated that stocks were on the lengthy side, even during periods of heavy demand, for various end-uses. Early in the year, buying interest for manufacture of ethylene glycol was not up to par, due in part to a heavy carryover of antifreeze stocks from 1953. However, as the year progressed and dealers' stocks were moved out, glycol producers became more active in the market. In the fourth quarter antifreeze business boomed, owing to the influx of new automobiles, most of which had larger cooling capacities.

Pulp and paper producers displayed a steady inquiry for most of the year, as was evidenced by reports that 1954 paper production was within 1 percent of that for 1953. Textile bleaching demand was off in accord with lower production in some quarters, and this situation was also reflected in lower consumption of hypochlorites and other bleaching powders. At the beginning of the year, output of chlorinated insecticides began to pick up as manufacturers began to make technical material for shipment to formulators, who in turn prepared solutions for the spring and summer season.

Chlorine Capacity Discussed

Consumption of chlorine for water purification was steady by nature, but one source pointed out that new construction dealing with public water supplies for the next five years was scheduled to average nearly double the level of the last five

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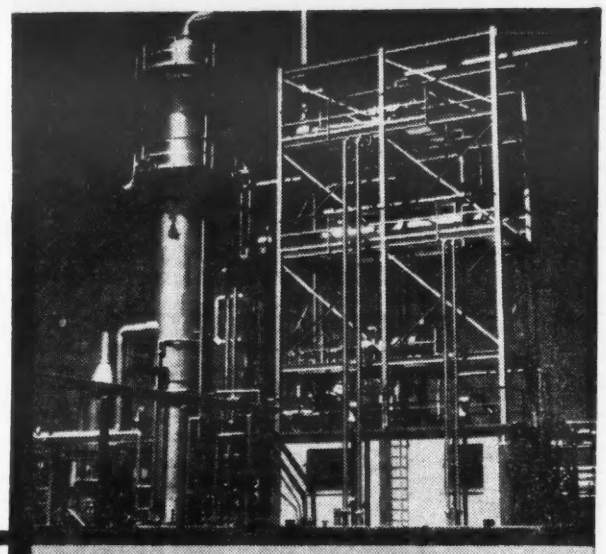

TABLE OF SPECIFICATIONS

MICROCRYSTALLINE

CROWN WAX	M.P. °F.	PENETRATION	COLOR—NPA	ACID NO.	SAP. NO.
15	180 Min.	4 to 6	4-5	14-16	50-60
23	180 Min.	4 to 6	4-5	20-25	55-65
36	180 Min.	5 to 7	5-6	30-35	75-85
50	180 Min.	3 to 5	dark	10-20	65-75
180	180 Min.	15 Max.	2-2½	Nil	Nil
200	190 Min.	8 Max.	brown	Nil	Nil
500	190 Min.	8 Max.	2-2½	Nil	Nil
*700	190 Min.	4 Max.	2-2½	Nil	Nil
*1035	195 Min.	2 Max.	2-2½	Nil	Nil
Jet Black	185 Min.	11 to 16	black	Nil	Nil

*Available in powdered form (16 mesh max.)

SYNTHETIC AND SPECIAL WAX

PRODUCT	M.P. °F.	PENETRATION	COLOR—NPA	ACID NO.	SAP. NO.
*P-20	210-220	2 Max.	3 Max.		
*P-25	210-220	2 Max.	3 Max.		
PE-100	195-200	2-3	4-6	15-20	45-55
R-50	190-200	2 Max.	4½ Max.	40-50	65-80
PC-13	185-195	6 to 8			

*Available in powdered form (16 mesh max.)

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HIGH GLOSS

UNIFORMITY

PURITY

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FLEXIBILITY

COMPATIBILITY

Most Petrolite waxes are shipped in paperboard cartons containing 8 ten pound slabs each. Jet Black Wax is shipped in 300 pound drums. Petrolite 700 and 1035 are available in powdered form, approximately 170 pounds to the fibre drum. Shipments are made from Jersey City, Chicago, Los Angeles or Kilgore, F.O.B. shipping point nearest customer.

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PETROLITE CORPORATION

WAX DIVISION

Chrysler Building, New York 17, N. Y. ★ P. O. Box 390, Kilgore, Texas

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P55-E

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years in order to take care of the annual 2½ percent increase in population and the 4 percent average annual increase in water use. Although demand for chlorine held up fairly well clear through the end-use pattern all year, producers were under pressure at all times to keep production from getting out of hand. One source estimated that the present chlorine production capacity would not be met by consuming demand until 1960.

Some sources were of the opinion that the potassium alkalies were not as closely affected by the first full year of peacetime readjustment as were the sodium alkalies. Although soapers ran into stiff competition from synthetic detergent makers all year, and continued to lose ground, there was a generally good withdrawal of caustic potash at stable prices for soap-making. Other chemical end-uses held up well, and by the end of the year, at least one source reported that it had sold up a goodly portion of its 1955 capacity.

Potassium carbonate sales continued to flourish, in large part due to the expanding television industry. At the end of 1954 it was estimated that the television industry was making some 11,000,000 sets annually. Each set requires a picture tube of high-grade glass into which goes potassium carbonate. Toward the end of the year, sales to that industry began to taper off, but another peak year was expected for 1955. Sales to other industries held up as well, particularly for high-quality ceramics, glassware, soft soaps and other applications.

Calcium Chloride Sales

Calcium chloride sales ran in a pattern somewhat contrary to the general trend of business last year, in that movement was heavy at the beginning and end of the year, but slackened during parts of the spring and fall. The main reasons for heavy movement of chloride at the beginning and the end of the year were increased use in highway ice control and in cold weather concrete. Suppliers near superhighway construction projects were particularly fortunate late in the year, as orders came in for large volumes of material to be used as a retarding agent for concrete.

Summer brought with it dry weather and a consequent brisk demand for dust control on secondary roads. Spring and fall were slack seasons, however, and sales were off acocrdingly. Production and supplies were plentiful most of the year, but in close balance with demand during peak seasons.

Contracts for sulfuric acid showed no changes during the year, although demand varied considerably from start to finish. Steel production's low ebb kept shipments down during the first half of 1954, but from July on demand went sharply up with steel output. Consumption for fertilizers was brisk during the late winter and early spring, and demand from that quarter did not suffer too much because fertilizer consumption in the United States in 1954 was only 2 percent below 1953 levels. Here again, as with many other basic chemicals, the synthetic detergent industry came into the picture, and was active for the most of the year. Demand from the petroleum and petrochemical industries also held to a good level. During the fourth quarter, buying interest rose appreciably, mirroring the general upturn of business toward the end of the year.

Nitric Acid Market Changes

Nitric acid started slowly, but showed gradual improvement as a number of consuming industries made adjustments to the changing economy. At first, demand from the steel industry lagged, but sluggishiness there was taken up in other parts of the broad end-use pattern. In October, producers found it necessary to increase prices on contract in order to cover increased freight rates, labor and material costs. The market ended 1954 on a firm note due to the high rate of steel production.

The sulfur industry broke all production records in 1954. Production of sulfur from all sources during the year reached an estimated 6,600,000 long tons, or 350,000 tons more than in 1953. Most of the production came from thirteen salt dome deposits in Louisiana and Texas mined by the Frasch process. At the beginning of the year, prices for crude sulfur were increased by $1 per ton. From that time on, prices remained stable, and in late December, producers were of the opinion that existing prices would continue on well into 1955.

Prices for borax, boric acid and boron chemicals remained unchanged during the year. Production in some instances was cut back early in 1954, but as glass industry demand picked up, pressure was put on anhydrous borax supplies. Stocks were in close balance, with substantially improved glass demand, until the close of the year. However, producers indicated that the supply position was by no means alarming, and that consumers could get what they needed with little or no delay. Boric acid reserves were readily available for a number of end-uses. In the fourth quarter, manufacturers announced that prevailing contract prices would hold at least until May, 1955.

Important Metallurgical Year

The year 1954 has been called by some sources the most important year for the chemical industry in terms of metallurgy. Output of such recently critical materials such as lithium and titanium was substantially increased. Selenium production, while improved, could not hope to equal rising demand, as the major portion of the metal went to producers of electronic equipment for the government. Prices were higher at the year's end. Nickel metal was also in short supply, as the government continued its stockpiling policies. Platers desiring nickel chemicals were in some instances said to be paying premiums for imported salts due to shortages in the domestic market. In December, the price of primary nickel was boosted sharply, and salts were correspondingly increased January 1.

Aluminum production in the United States in 1954 set an all-time record. Total production for 1954 amounted to 2,921,174,443 pounds, as compared with the previous record set in 1953 of 2,504,029,277 pounds. Industry sources foresaw a bright future for the aluminum industry in 1955, due to the finding of new end-uses, as well as the expansion of present outlets. Demand continued strong all year, and, in August, producers increased prices because of the cumulative advance of processing costs.

Tin Metal Fluctuations

Tin metal fluctuated rather narrowly on spot during the year, and shipments were held at a good level during most of the period. Plating mills began the year rather slowly, but picked up well from the second quarter on. There was a great deal of enthusiasm concerning new uses for cans, as consumption of canned soft drinks showed a definite upward trend. By the year's end, new projects such as the canning of fresh milk were also under consideration, or being developed.

The price of spot copper in this country was kept firm all year by various labor difficulties in the United States and in Chile which kept supplies tight. Copper was in such demand during the fourth quarter that smelters were offering as high as 28½ cents per pound for No. 2 scrap. The price of primary domestic copper ended the year at 30 cents per pound. Lead and zinc stockpiling by the government substantially helped the market in 1954. Other factors which led to a firming price structure were reduced primary production and lower stocks in the hands of producers.

Mercury prices skyrocketed last year, beginning at $187 per seventy-six-pound flask and at one time reaching as high as $330. Offerings throughout the year were closely held by suppliers. Consuming demand remained good for most of the year, but dwindled at the higher price until, by the years' end, listings were brought down to $315 to $320. Major producers of molybdenum and lithium chemicals changed prices during the last quarter. Molybdic oxide, the basic molybdenum chemical, was increased due to higher production costs. Lithium hydroxide was reduced owing to expanded production facilities.

Trend of Heavy Chemical Prices
100=1949 Average

	1954											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	98.53	98.58	98.58	98.41	98.40	98.48	98.49	98.53	98.53	98.54	98.54	98.17
L.	98.43	98.49	98.40	98.39	98.39	98.48	98.48	98.48	98.51	98.53	98.29	98.13

	1953											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	95.96	95.62	95.44	97.51	97.59	97.63	98.36	98.35	98.34	98.26	98.29	98.43
L.	95.84	95.44	94.86	97.22	97.27	97.58	98.35	98.28	98.27	98.27	98.22	98.28

Petroleum Derivatives

The petroleum industry encountered serious production and price problems during 1954, and found some of them still unsolved by the end of the year.

The year opened with the level of crude oil output and refined product inventories considerably in excess of those actually required. Corrective action appeared called for, not only to preserve a stable price structure, but to avoid waste of this resource and to maintain the crude productibility and refinery capacity needed for the country's security. Also a problem was the level of crude oil imports, which some of those in the industry considered excessive and detrimental.

As the year progressed, inventory excesses were worked off to some extent, and output was reduced by many of the large producers. By the year's end the statistical position of the industry had become considerably stronger than it was earlier, and even stronger than during the late summer. In addition, serious and harmful price weaknesses were avoided and the price structure, in spite of cuts in some crude and product quotations, remained stable.

The use of petroleum in the United States during 1954 established the twelfth annual consecutive gain. Demand was expected to be 1½ to 2 percent greater than in 1953, when the final returns are tabulated. This rate of increase, however, was less than the 4 percent that had been forecast and proved disappointing to many in the industry.

Demand for Toluol Eases

The buying pressure on toluol continued to ease. Gradual cutbacks in government demand for aviation gasoline proved the biggest cause. Of importance, also, were cutbacks in nitration needs for arsenals. As toluol became more amply available, an easing was also felt in xylol demand, since many potential consumers of toluol, who had not been able to obtain this material, had substituted xylol and were switching back. Use of xylol from new sources continued to be felt in the market, however, and material moved quite well.

As more competition developed in toluol and xylol, buyers began looking for bargains. The race toward higher octane ratings in motor gasoline provided an outlet for aromatics in addition to their use as solvents. Prices for toluol and xylol were reduced 1 cent per gallon at two shipping points, Philadelphia and Bayonne, N. J., effective April 19. The changes were seen as adjustments brought on by the prevailing ease of supplies.

An immediate effect of the cut in toluol and xylol prices was a reduction in some partial aromatic solvents on April 30. The cuts in partial aromatics ranged from one-half cent to 3½ cents per gallon. It was noted that partial aromatic solvents were valued in direct relation to xylol and toluol, and that any significant change in prices of the aromatic components would exert a change in partial aromatics.

European Market Weakens

The European market for aromatics weakened during the second half of the year, partly because of competition from iron curtain producers. Domestic demand continued to be active, but failed to keep pace wtih the supply level. One difficulty arose from the build-up in capacity that had been spurred by the Korean fighting and the needs for material that this situation brought about. Once these added facilities were in operation, producers were reluctant to cut back their output, as the most efficient production resulted from running the facilities in high gear. By the end of the year, both toluol and xylol were moving well to a good industrial demand, but were available in more than ample quantities and were generally felt to be in a very loose supply position.

Demand for partial aromatics was hurt to some extent by the shutdowns in the automobile industry in August and September. The duration of the shutdowns was not long enough to produce any abnormal weakness, and prices held steady during the third quarter. Other consumers maintained a good volume of orders, and although suppliers had more material than immediate market needs required, the picture remained good. With the return to full production in the automotive industry in October and November, sales were given a boost. It was noted, however, that the decline in demand from the cutback in car production did not produce so drastic an effect as had been expected in some quarters. At the year's end, aromatics were in long supply and aliphatics were holding more closely in balance.

Microcrystalline and paraffin waxes started the year with a good demand and with stocks balanced. Consumption by domestic and foreign consumers continued very good. With supplies limited by the amount of lubricating oil the industry produced, the wax market remained in a very healthy state.

Crude scale paraffin wax prices were advanced one-half cent per pound during the first week of June. The increases were made in response to the greatly reduced production of lubricating oils in Pennsylvania fields. Prices remained stable and firm throughout the balance of the year.

Mineral spirits moved in good volume to well-sustained demands from the paint industry. Producers were able to keep abreast of demand for the regular and also the specially-refined, or odorless, type. Prices remained on an even keel for this, and also for other aliphatic solvents. Oilseed crushers and extractors were active buyers of nexane and octane and were well supplied with material.

Prices of tetraethyl lead antiknock compounds were cut three times during the year—during the middle of March, at the first of May and at the first of November. Production efficiencies were cited as the reasons for the reductions.

Situation in Propane, Butane

Demands for propane and butane followed their customary seasonal pattern throughout the year, with heaviest usage during January, February, March and December. Supplies during these months were a bit tight in certain areas, but no overall shortages of acute proportions developed. During the slack summer months, producers concentrated on building up stocks and in filling underground storage. The use of liquefied petroleum gases continued to broaden. Consumption on farms showed a gain during the year

The troublesome problem of Iran's long-standing oil shutdown was settled during 1954, after months of negotiations on the part of oilmen in the United States and in England. The long dispute that shut down Iran's refineries not only kept a significant part of the world's oil resources out of use, but created a situation of extreme tension in international politics. On August 31, representatives of an international consortium of eight oil companies met with representatives of the Iranian government to initial a contract according to which the consortium agreed to produce and sell Iran's petroleum for 50 percent of the profits.

The Petroleum Administration for Defense was closed down at the end of April and its remaining functions were inherited by the oil and gas division of the Interior department.

Trend of Petroleum Derivatives Prices

100=1949 Average

	1954											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	105.35	105.43	105.42	105.20	104.75	104.42	104.42	104.42	104.75	104.75	104.75	104.75
L.	105.32	105.34	105.20	105.14	104.32	104.42	104.42	104.42	104.40	104.75	104.75	104.75
	1953											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	104.13	104.27	104.48	104.50	104.49	104.49	105.38	105.39	105.37	105.38	105.38	105.35
L.	104.13	104.13	104.27	104.48	104.49	104.40	105.33	105.36	105.29	105.37	105.35	105.30

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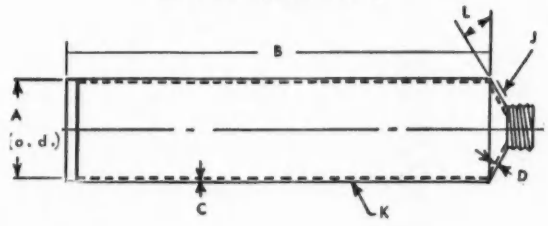

A . . . . . Outside Diameter
B. . . . . Body Length
C. . . . . Wal Thickness
D . . . . . Sho ilder Thickness
J. . . . . Shoulder Embossing
K . . . . . Base Coat and Printing
L. . . . . Shoulder Angle

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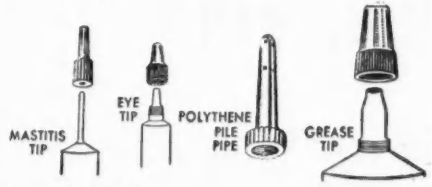
Size of Opening	3/16"	¼"	5/16"	7/16"



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Agricultural Chemicals

Fertilizer consumption in the United States in 1953-54 amounted to 22,875,000 tons, according to preliminary estimates compiled by the Department of Agriculture. The figure represents a decrease of about 2 percent below figures for 1952-53. On a plant food basis, however, USDA indicates that total consumption amounted to 5,851,000 tons of nitrogen, available phosphorus pentoxide, and potash or an increase of about 4 percent over 1952-53 levels.

The department found that on a regional basis, 1953-54 consumption of all fertilizers was lower east of the Mississippi than it was in 1952-53, particularly in New England and the South Atlantic states. In the west north central area, however, farmers took approximately 7 percent more material than in the preceding period. The heaviest decrease was in New England, where a 7 percent drop in consumption was recorded.

Mixed fertilizers accounted for nearly 15,675,000 tons, or about 69 percent of the total tonnage of fertilizers consumed during the period. In taking into account the fact that 1954 was a year of changeover for agricultural economics, in which flexible parity was established for many staple items, trade sources were well satisfied with the progress shown during the transitional period, pointing out that the 2 percent drop in total consumption was negligible in comparison to what had been expected.

Index Lower During Year

The combined index for animal and plant foods and pesticides began the year at 111.28 and ended at 109.37, varying only slightly and reflecting in part the 2 percent decrease in fertilizer consumption, as well as easier availability of some of the larger volume items. Among inorganic materials, ammonium sulfate, potassium muriate, potassium manure salts and potassium magnesium sulfate were some items adjusted downward due to easy availability, or to stimulate buying interest. Later, these materials were increased owing to peak demand.

Some inorganic fertilizers, although plentiful, remained unchanged on contract throughout the year. During 1954, several new producers of anhydrous ammonia came on stream. Despite this, popularity for direct application as well as for mixing increased proportionately, until at the year's end prices stood unchanged. Moreover, producers felt that even though production facilities had been increased substantially, there was a likelihood of tight supplies during the peak demand season next spring.

Phosphate rock was in very plentiful supply all year, and most of the time moved out well to acidulators and for direct application. After mid-year, however, producers found it necessary to adjust prices at mines due to labor and fuel oil costs. Superphosphates were in ample supply all year, and lengthy supplies were occasionally tapped for overseas shipment. Ammonium and sodium nitrate, while classified as primarily direct application materials for top dressing, in former years were ordered far in advance by consumers. This was not the case last year. Observers said that they had not seen supplies in such quantity since the war. The result of this situation was that agricultural consumers were content to play close to the vest, buying for immediate needs only. Consumption for chemical end-uses therefore held up an otherwise sagging market during the off season.

Ammonium Sulfate Output High

Cokeoven ammonium sulfate output continued high, despite a 21 percent drop in steel production over 1954. Stocks were tight during the season of peak demand, but late in the year there were heavy surpluses accumulated at mills. Some pressure was taken off the situation by shipment of a large block of material to Korea under Foreign Operations Administration authorization. One source estimated that placed on the market for late December shipment were 20,000 tons from the west coast, 30,000 tons from Gulf ports and some 20,000 tons from east coast shipping points.

Cyanamide and potassium muriate were plentiful all year, and consumers had no difficulty in getting what they needed. Contract prices were stable, and in some instances were extended at least until next May. During the winter, sizable quantities of cyanamide moved in the Mississippi delta for weed control and plowing in. Muriate sales were also unseasonably good, particularly in regions declared disaster areas by the President owing to prolonged drought. The south and southwest were particularly hard hit, and came in for a large share of government aid. Dry weather took its toll even in New England and isolated sections of the midwest.

Imported Chilean sodium nitrate was lowered early in the year in the competition with American material. The new prices were effective in that large quantities of material moved out to consumers during the peak season. Late in the year, the usual build-up of stocks began in preparation for 1955 demand. Nitrogen solution was more or less steady during the year, governed by contract clauses allowing increases or decreases, depending on seasonal inquiry.

Urea Tight Throughout Year

Urea was about the only large volume fertilizer chemical in fairly tight supply all year. This item enjoyed the advantage of being a heavy mover to the chemical industry for urea-formaldehyde resins and other chemical applications during the off-season. Also of note was increased use over the last quarter for stockfeed purposes. Beginning 1954 in strong fashion, fertilizer demand did not taper off until late fall. Then came chemical and stockfeed demand to take up the slack. It was hoped that projected urea plants scheduled to begin operation late in the year, or during early 1955, would take some of the pressure off currently tight supplies.

Among fertilizer materials, the product perhaps most accurately reflective of the national farm situation last year was lime. It was reported late in the year that lime consumption was down 24 percent from the previous year, and was the lowest since 1943. There were three reasons which summed up the decline of lime consumption, as well as the slight falling-off in total fertilizer use:—(1) Severe drought in several major areas, (2) lower farm income and (3) reduced federal subsidy.

Organic by-product animal and plant foods showed varied activity, but remained within the limited scope into which they have been crowded by more plentiful inorganic materials over the past several years. From time to time, castor pomace was unavailable as mills in this country curtailed crushing due to lack of bean imports. It appeared to some observers that the situation would remain critical due to the fact that it was generally cheaper to import castor oil than to bring in beans for crushing.

Dried Blood, Tankage, Fishmeal

Dried blood began the year in its usual weak position due to heavy meat production and slow inquiry. As demand improved, prices increased, and late in the year, continuing heavy production once again outweighed off-season buying interest. Most such by-products of the packing industry underwent the same cycle. Tankage, for example, began the year at $6.75 per unit of ammonia, rose during the peak season to $8.50 and then, near the year's end, fell off to $6.25. Fishmeal remained in fairly good balance all year, due to the fact that production and demand coincided.

There were no unusual trends set in the consumption of pesticides during 1954. The year began with spotty activity on the domestic market. Consumers did not buy ahead due to the generally good availability of pesticides. The market for DDT began quietly on the domestic front, but heavy foreign competition influenced South American buying. West Germany more than ever made itself felt in the Latin American market, due to vastly increased pesticide output at highly competitive prices.

During the year it was estimated that west Germany exported approximately 30 percent of ts total production. Some 40 percent of the material allotted for export was sent to Latin America. Although 1954 figures for west German export to South American countries are not yet available, it was estimated that 1953 exports to that area amounted to 14,220,000 pounds. For most of 1954 competition

Trend of Agricultural Chemical Prices

100=1949 Average

1954	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	111.28	111.52	111.80	112.92	112.97	111.43	110.70	110.22	110.59	111.09	109.91	110.21
L.	111.23	111.41	111.52	112.67	112.87	111.39	110.60	110.19	110.36	110.59	109.62	109.58

1953	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	113.04	112.73	112.56	112.09	111.61	111.58	112.37	112.04	112.03	111.51	111.50	111.25
L.	112.75	112.56	112.12	111.99	111.55	111.09	112.08	111.94	111.51	111.38	111.33	111.23

remained keen, but it was reported that by the year's end a shortage of chlorine in Germany was adversely affecting production there, with the result that offerings became limited.

In the early spring, the outlook for DDT became better due to government procurement programs for the Far East. Domestic buying was on a cautious basis, and it was not until late spring that demand in this country showed real improvement. As the summer wore on, however, the weather became dry and hot resulting in less infestation than had been expected. In the meantime, some competition developed among producers, but not to the extent that price structure was seriously shaken.

Demand, which had not been spectacular during the summer, tapered during the fall. It was late in the year before export demand once again took hold. By mid-December, the most helpful influence on the market was the issuance of invitations by the General Services Administration for bids on 16,596,000 pounds of 75 percent wettable DDT powder for shipment between January 15 and April 15, 1955. At the year's end, the industry was held in suspense concerning the outcome of the bids. To most sources, however, it looked as if GSA had given the pesticides industry a good send-off into 1955.

Price activity among insecticides and herbicides varied as to market position. Early in the year, parathion was advanced corresponding with a squeeze on supplies. However, by November such confusion existed as to what price should be asked, due to heavy and expanded production, that makers in some instances had not released new schedules by the end of December. Demand was fairly good during the peak season for most herbicides, but easy availability of 2, 4-D acid brought about substantial reductions by November.

Cryolite, steady and unchanged for a long period, was increased late in the year. On the other hand, due to the severe drought in the south and southwest, cotton dust was severely hit. Demand for BHC did not fluctuate sufficiently enough to cause any price upheaval. Makers of pesticides, not dissatisfied with last years export and domestic business, looked with hope at the 1955 situation both in this country, and in Latin America, where more extensive financial aid, and consequently heavier sales of pesticides, were expected for 1955.

Drugs, Fine Chemicals, Botanicals

—Continued from page 3

supplement animal feeds. In this case, the function of diethylstilbestrol was in the improvement of the efficiency of food conservation in feeder cattle.

The hormone was given in small doses in the feed, with the object of stimulating microbial population in the rumen, thus enabling the animals to do a better job in converting the feed ingredients into the nutrients required for meat production. It was significant that the use of diethylstilbestrol cut down the amount of feed necessary to achieve a given weight gain as compared with conventional feeding results. No traces of diethylstilbestrol were reported found in the meat of the animals fed on this diet. This factor was very important in light of the difficulties encountered years previous with poultry caponized with diethylstilbestrol.

Another interesting development last year was the resurgence in use of sulfa drugs. One of the basic reasons behind the rise in demand for sulfa drugs, a demand which was expected to continue strong in 1955, was the marketing of these drugs in various combinations with other sulfas and, in some instances, antibiotics. There has been a rising awareness of the problem of the increasing resistance of important pathogenic bacteria as a result of

Trend of Drug & Fine Chemical Prices

100=1949 Average

	1954											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	88.35	88.28	87.45	71.91	71.94	70.99	68.78	68.81	68.85	67.79	66.98	67.17
L.	88.28	87.45	87.45	71.91	70.99	68.81	68.76	68.76	67.79	66.96	66.96	67.17

	1953											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	91.74	91.73	91.18	90.36	90.23	89.50	89.33	89.33	89.24	89.15	88.50	88.35
L.	91.73	91.28	90.38	90.23	89.56	89.30	89.30	89.23	89.22	88.53	88.49	88.35

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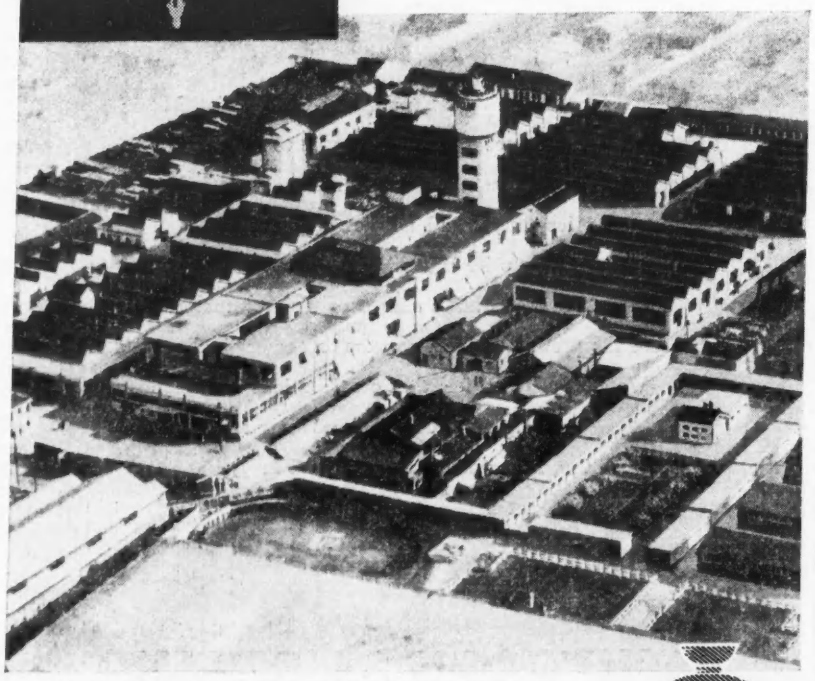

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the widespread use of antibiotics. Combinations of sulfas and antibiotics enhance therapeutic effectiveness, it was stated. Used by themselves, various of the sulfa drugs have inspired new interest in the medical profession.

VA's Isoniazid Program

In the latter part of 1954, the Veterans Administration reported that a clinical program was underway to test the efficacy of isoniazid in the treatment of multiple sclerosis. While treating tuberculosis patients who were also suffering from multiple sclerosis, it was observed that some of the pain caused by the latter was eliminated. Further testing was expected to prove whether isoniazid might be effective in the treatment of multiple sclerosis, a development which would undoubtedly boost the demand for the drug.

Perhaps the most notable achievement in medical science last year was the recognition of the fact that mental illness could be alleviated and even cured by drug therapy. Demand for such a drug, reserpine, which is the principal alkaloidal ingredient of rauwolfia serpentina root, has been growing at a fantastic rate. According to trade reports, it has proved very effective in the sedation of violent mental cases. Reserpine could prove to be one of the most effective therapeutic drugs in this field, it was said.

In addition to its success in the psychiatric field, the above drug was in heavy demand in the powdered root form for use in the treatment for hypertension, an application in which it has no comparable rival. Rauwolfia serpentina root has been used in India for centuries in the treatment of heart condition and only recently its eminence in this field was recognized in this country.

Demand for Rauwolfiia

Since the rauwolfia serpentina species of the root is confined to a relatively narrow area of production in India and its growth subject to vagaries of weather, consumer demand in this country, not counting Europe, has outrun available supplies. Early last year, the Indian government placed restrictions on the promiscuous exportation of the root, since it was feared that the species would be exhausted. Exports of the root became subject to license with buyers receiving less than contracted for and, usually, much later than originally scheduled.

Further difficulties beset importers later in the year because as the Food and Drug Administration rejected sizable quantities of rauwolfia serpentina root which was not of the serpentina species. Only the serpentina species was authorized for grinding into powder to be pressed into tablets. Three other species were authorized in addition to serpentina as sources of reserpine. Since these other species come from various other parts of the world, supplies or reserpine were expected to prove ample while rauwolfia serpentina root itself was expected to continue in tight supply for some time.

Drug Imports a Factor

The importation of drugs and fine chemicals from abroad continued to harass domestic producers last year. There has been a move for higher tariffs, but the current foreign policy of the government was expected to preclude any such action and fine chemical items offered in this market last year included isoniazid, crude iodine, tartrates, niacin, p-aminosalicylic acid, pepsin, saccharin, thymol, vitamin B_1 (thiamin hydrochloride), vitamin C (ascorbic acid), tartaric acid, cream of tartar, caffeine, aminophylline and theophylline. Most of these compounds were in ample production by domestic producers and as a result, manufacturers were hard-pressed in many instances to compete price-wise with imported materials.

Producers of crude iodine attempted to drive Japanese crude iodine out of the market at the beginning of the second quarter last year by slashing prices sharply. Since Japanese producers were said to be subsidized by their government, the attempt was unsuccessful and, in November, domestic producers moved prices upward, although not back to the same levels in effect prior to the April price cut.

Three Rises for Theobromine

Theobromine alkaloid was advanced three times during the past year due to rising raw material costs. This alkaloid is extracted principally from cacao beans. Due to a blight in Africa, the prime source of supply, prices of this commodity rose sharply in 1954. Early in the year this also had been an item which was imported and offered at a lower price than the domestic market.

The synthetic vitamin industry had a fairly satisfactory year, but one which was marred by the necessity to cut prices in order to compete successfully with synthetic vitamins entering this country in

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greater volume from both Europe and Japan. Prices on ascorbic acid (vitamin C) and thiamin hydrochloride (vitamin B_1) were reduced drastically last September as domestic producers moved to undercut imported vitamins. The cut was apparently only partially successful, since a good deal of imported material continues to be offered in the spot market at competitive levels.

While domestic producers took action to force out imported synthetic vitamins, natural vitamins continued on the downgrade, at least volume-wise. There has been a popularity decline in the feed industry for low potency fish oils. High potency stabilized vitamin A products have been shown to deteriorate less upon storage after being mixed in feeds. The use of high energy rations for animal feeding has increased the use of accompanying high levels of both water-soluble and fat-soluble vitamins, it was said.

Vitamin A in Margarine

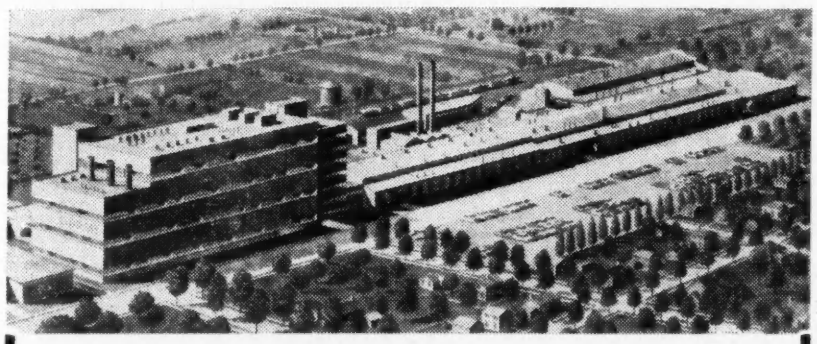
The use of synthetic vitamin A by the margarine industry has been steadily rising in line with the increase in the consumption of margarine. This synthetic vitamin was said to have virtually replaced natural A in this application. There has been an increase in vitamin consumption by the average consumer as a result of a step-up of the fortification of cereals and bakery products, notably bread.

Animal bile products, in general, appeared to be losing some importance as other products come to the fore. The primary reason behind demand for cholic and dehydrocholic acid had been due to their use as starting points in the synthesis of cortisone. This manufacturing method has since been largely replaced by other processes.

Among other notable developments in this market last year was the price advance in aspirin and acetophentidin at the year's end. It was the first price change in four years, it was pointed out. Aspirin production reportedly topped all other drugs, quantity-wise. Another major price change was the long-awaited advance in mercury salts. Until last year, producers of mercurials chose to absorb increased raw material costs since consumer demand was slow. Government procurement of enormous quantities of quicksilver drove prices sky-high, necessitating an increase in mercury salt prices.

Trading in Botanical Drugs

Trading volume in botanical drugs was reported to have been about on par with 1953. Some trade quarters indicated that they had done a slightly better business last year than in 1953. With the exception



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of a few important botanicals, the supply situation was ample during the year and carry-over was estimated to be adequate to cover spot needs until the new crop commences this year.

On the whole, last year turned out better than 1953 insofar as supply was concerned due to two major factors—increased labor for botanicals collection and favorable weather conditions early in the crop year. There was large unemployment in the coal fields as well as lay-offs in textile mills and furniture plants, industries which are virtual mainstays to the southern economy. The surplus of labor in the coal-producing areas caused a rise in botanicals collections there. Collection of roots and herbs, particularly roots, reached such a high level that dealers cut buying prices in the primary market in order to discourage further gathering and thus avoid the possibility of a depressed market in New York.

The rise in botanicals production in other areas was less than in the coal-mining regions. Early in the season buying prices were fairly steady, but as the season progressed there appeared to be a downward tendency. A number of price declines at origin occurred later in the season, reflecting the substantial quantities gathered.

Weather Conditions Detailed

Although the weather was more favorable last year for botanicals growth, nevertheless, there were a few areas in which collection was adversely affected by the local weather. In the northwest, excessive moisture severely curtailed production of senega root and prices rose sharply during the year. With the carryover very small as a result, the market in this item was expected to continue quite strong at least until the 1955 crop begins to come in, later this year.

Lobelia herb was another botanical, production of which was seriously hampered by the weather. Drought conditions in the midwest were responsible for the short supply of this herb throughout most of the consuming season. Prices advanced to extremely high levels and by the end of the year were strictly nominal.

Other items in the domestic botanicals market to fall short of actual demand were wahoo root bark and mandrake root. The former advanced to very high price levels, while consumer demand for the latter far exceeded supplies. The scarcity and rising price of mandrake root was reflected in two major price hikes in podophyllin resin, an important drug item made from the root. No relief was expected in these items until the new crop season which will not be for several months.

The market situation in imported botanicals had a strengthening tendency last year, a trend which is expected to continue into 1955. World tension and a general rise in standards of living in various parts of the world would seem to preclude any return to former days when some imported botanicals were to be had very cheaply. The fact that Europe has become a substantial botanical drug customer has also affected botanicals prices. An excellent example of this is ipecac root. The spot market has steadily advanced in keeping pace with replacement quotations from source. Europe has been completely unhibited in its buying of this item, thus putting producing areas in the extremely favorable position of being able to dictate market prices.

Low Quality Materials Shipped

There has been an increasing trend toward the shipment of low quality materials to this market. With other crops such as cocoa, coffee and vanilla beans affording more profit for less labor expended, it is not difficult to understand the indifference toward botanicals collection in tropical regions. There has been a distressing lack of cubeb berries capable of meeting FDA specifications. Many lots of berries were rejected for failing to come up to oil content standards, it was noted. High quality juniper berries were in short supply for a good part of the year, as well as orris root, both of which come from Italy. In regards to the latter, shippers held offerings back later than usual in an attempt to drive the market higher. This maneuver did not meet with success, however.

Papain and ergot, usually fairly active botanical items, were rather dull last year. The quality of a good deal of the papain imported during the past year was reported to be below standard. In the early part of the year, the Ceylonese government announced that papain shipments would have to meet certain standards before an export permit could be secured. This regulation was suspended not long after its promulgation, however, and shipments continued unrestricted for the balance of the year.

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Industrial Organic Chemicals

Despite some early market weakness for various products, organic chemicals regained their strength by mid-year and worked up to a good sales finish in the last few months. In the last half, a generally good solvent demand moved alcohols, ketones and esters. Lacquer accounts were taking solvents while automobile finishes called for very good volumes. The furniture trade produced a good volume of business for lacquer materials. Synthetic resins moved at a steady pace, requiring many organic chemicals. Materials that went to plasticizers and eventually found their way into coatings and plastics enjoyed a good call. The tempo of activity for industrial organics increased in the late weeks of the year. Orders received for the new year, and anticipated demand, led many sources to look at the first half of 1955 as a period of expansion. No tremendous surges were predicted, but the leaning was definitely towards optimism.

Prices at Outset Down

Industrial organic chemicals did not lack price activity in 1954. However, some of the markets did not have all of the strength that they could have used at the beginning of the year. Most of the price revisions in the first four or five months were downward.

There were a few advances, such as increases in methyl chloride, perchloroethylene and crude glycerine prices during the early weeks of the year. The reductions started in the first week of February with a cut in ethanolamines for the first time since 1950. At this time, a reduction of 1½ cents for mono-, di- and triethanolamines and ethylethanolamine reflected the trend of the market, but not its full weakness. These amines were destined to fall twice that amount later, along with ethylene oxide and its glycol derivatives.

The ethylene oxide, ethylene glycol, ethanolamines, diethylene glycol, triethylene glycol, propylene glycol and dipropylene glycol markets were all lowered in a move at the end of March. Propylene oxide followed the same pattern. These changes were the result of reduced demand, ample stocks, expanded plant capacity and keen competition. The reductions served their intended purpose of firming up the markets because the glycols, oxides and amines recovered their stability in the early weeks of August and went back up 1½ cents. This advance went into effect immediately for spot material, but was delayed until October 1 for contract business. Glycol and amine prices finished out the year at those levels, and were decidedly firmer there.

Methanol Declines in June

Still other features of early price weakness were seen in the June methanol reduction. Antifreeze demand in the previous year had not been at its best, due to mild weather conditions and competitive conditions in certain areas. Hence, synthetic methanol was lowered 5 cents per gallon to firm up the picture. This precipitated a fractional drop for formaldehyde and paraformaldehyde. Then followed a cut in prices of pentaerythritol, dipentaerythritol and tripentaerythritol, all due to lowered raw material costs (formaldehyde) and expanded plant capacities.

The price of 27 cents per gallon proved to be low enough to stabilize the methanol market and stimulate demand. When the canning season for antifreeze came in, sales quickly worked up to a good level. The antifreeze season was good and long. Sales in this direction lasted much longer than many sources had anticipated. Even towards the end of the year when most contracts had been already completed, fill-in business lasted. Industrial demand for methanol would normally be expected to play a more prominent role in this season. Industrial needs certainly did improve. Antifreeze buying was sustained and de-icing outlets continued to call for a good volume of methanol right through the end of the year. Before all of the buying for the antifreeze season was over, many suppliers reported that consumers were also making purchases for stock replenishment. This was in addition to the normal refilling of pipelines after cold weather moved material out into consumption channels.

Ethylene Glycol Business Good

The good antifreeze business was enjoyed not only by methanol, but also by ethylene glycol. This glycol started to feel a boost of sales when the canning season began and did not experience any real reduction of interest until very late in the year. Here again, producers were inclined to judge that consumers were buying a little material for their stockpile late in the year. And, in this market too, the strength of the market in the second half of the year readily counterbalanced the poor start. All of the glycols ended the year in a much firmer position in the market.

The price rise of 1½ cents for ethylene oxide and its glycol and amine derivatives was followed by similar moves for diethylene, propylene, dipropylene and hexylene glycols. The glycols and ethanolamines enjoyed a good level of demand, particularly after the summer months were over. As business levels expanded, the glycols followed right along, moving at what producers called a very satisfactory pace. Of course, the status of the market had not changed for the ethylene oxides and propylene oxides as far as production capacity was concerned. There was still more capacity than consumption called for. But, producers were able to keep their production at a good level by the end of the year and move it without building up surpluses. This changed the tone of the market.

Dissatisfaction With Profit Margin

Many sources were still dissatisfied with the narrow profit margin growing out of decreases in prices early in the year. However, the feeling in the market was better because prices were not about to fall again, and producers could sell what they produced.

Among other early price reductions in 1954 were lower tags on acetone, sebacic acid, 2-ethylhexyl alcohol, iso-octyl alcohol and edible lactose. Acetone came down to a level of 8 cents per pound in April, where it managed to hold on, despite shading, until mid-November. In November the forces of too much production capacity, ample stocks and consumer pressure forced another one-half cent cut in acetone quotations. The sebacic acid and the octyl alcohol price drops stemmed from extreme competition and general price demoralization that developed in March and April in the plasticizers markets.

A little later, in May, methyl acetone was decreased 9½ cents. Polyoxyethylene sorbitan monostearate and tristearate came down 2 cents. In early July ethyl silicate and tetraethyl orthosilicate were lowered one cent and 2 cents per pound, respectively. September saw tributylamine quoted 7 cents per pound lower. Sucrose came 15 cents per 100 pounds the same month. On November 1, price decreases were made for isobutyraldehyde amounting to 21½ cents per pound and vinyl chloride monomer, which was 2¾ cents lower. The large cut for isobutryaldehyde was reported to have been made possible through economies of expanded production and to have been an effort to stimulate wider use. New grades and quantity prices were listed along with the cut. The former anhydrous l.c.l. price was changed and a CP grade was offered in carlots and l.c.l. A technical grade material was offered in tankcars, carlots of drums and l.c.l. drum quantities.

Formaldehyde Market Breaks

In December reductions were for crude CMC, 65 percent and 96 percent, both coming down 2 cents in carlots. The formaldehyde market broke, falling a fraction of a cent—enough to make many producers unhappy with the narrow profit margin. The slim profit margin was emphasized by the fact that all sources did not follow on carlot quotations and west coast prices remained the same. The cost of methanol on the west coast had something to do with holding formaldehyde up there, but the 3-cent tag on uninhibited and 3.3 cents on 37 percent methanol inhibited material in the east also were factors.

Further, methanol or other related products, which normally might be expected to follow the reduction, did not go down. The single exception was the 91 percent flake paraformaldehyde, which was reduced with formaldehyde because of the similarity of the products. Powdered material and USP X were unmoved. One of the final reductions of the year was a 2-cent drop for adipic acid reported in the late weeks of December.

There were several examples of price firmness among the markets during the year. Aside from the firmer tone dis-

Trend of Industrial Organic Chemical Prices
100=1949 Average

	1954											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	....	....	....	132.54	132.29	131.93	131.89	132.06	132.06	132.06	132.06	130.44
L.	....	....	....	132.38	132.07	131.91	131.89	131.89	132.06	132.06	130.45	130.43

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played by glycols and amines during the second half of the year, there were examples of price firmness both by advances in quotations and more subtle reversals of once-weak markets.

Alcohol Situation Detailed

The alcohol market was one of the latter cases. Prices had been weak earlier, and until June it seemed a break was near. Then, producer resistance to price weakening firmed up in July. And, by the end of August the price was quite firm at 40 cents per gallon. The fall pickup in business levels definitely helped producers to carry it off. Production capacity was beyond consumption requirements, but it was not fully tapped. The demand was there from a variety of outlets. Solvents, cosmetics, pharmaceuticals and chemical end-uses all provided an extremely good level. Alcohol was not completely out of the woods because some shading existed for large contract commitments. But, at year's end, no one expected the posted level to fall below 40 cents.

The ketones were solvents that held their price levels and enjoyed good activity for the best part of 1954, thereby displaying a firmness that balanced some of the weakness for organic chemicals during the year. Methyl ethyl ketone and methyl isobutyl ketone experienced a reasonably good call from lacquer accounts. Demand from the automobile industry provided particularly good interest after 1955 models were introduced. Production in early fall boosted lacquer solvent activity in the furniture industry. MIBC also was doing well in solvent outlets. In fact, general solvent demand began to show some strength in late summer and built up to a formidable level by the time business expansion had reached its peak.

Solvents in Steady Demand

Most solvents enjoyed a pretty steady call from the various outlets. The esters moved quite well through this period. Both butyl acetate and ethyl acetate contributed to the overall stability of industrial organic aliphatics. The same solvent call had much to do with keeping acetone in a relatively firm position, even though more production was becoming available via cumene phenol plants which started producing last year. Acetone is a by-product, or co-product, in this process. The amount of solvent available from cumene is necessarily proportional to the volume of phenol moving.

Since phenol production was not close to its peak last year and only began to show some significant buildup in the last several months, the surplus of acetone from that direction was not as much as it otherwise might have been. With three new cumene plants operating in 1955, the by-product material was expected to pose more of a problem unless industrial consumers require more acetone than they needed in the past year.

Vinyl Acetate Monomer Rises

Prices that went up, excluding those already mentioned, included a 1 cent rise for vinyl acetate monomer in July, a firmer price for 2-ethylhexoic acid, an increase of 9 cents for refined fermentation amyl alcohol, 128° to 132° C. and for the ACS grade. A range was carried in quotations of refined fusel oil when some sources advanced the price 5 cents at the same time as the amyl alcohol changes. Reduced fermentation operations of the past year or two have resulted in a consistent shortage of crude fusel oil. The consequence has been tight supplies of refined fusel oil, amyl alcohol and fermentation amyl acetate as well. This shortage certainly did not hinder the development of synthetic amyl alcohol, derived from pentane.

Primary amyl synthetic and synthetic mixed amyls have been enjoying a good level of business for solvent uses, some of the demand having come from consumers who were unable to find any fermentation alcohol or esters. The shortage of fusel oil was not one that was likely to be alleviated. Production of synthetic alcohol has been ample to supply the bulk of consumption needs. Thus, fermentation operations were expected to do no more than hold at about the levels where they are currently. Thus, there was little prospect of an increase in fusel oil output.

Glycerine prices were very significant in the overall stabilitzy of chemicals in this market. Refined glycerine sales held up very well through the year. Demand for refined grades was good for such large outlets as cellophane, synthetic resins, pharmaceuticals and explosives. The call from these and other outlets was very good in the last four or five months. Supplies and production never got drastically out of balance. A steady output of synthetic material greatly aided in filling in the gaps left by crudes that were not imported in this country last year. After a little unsettled period in the first quarter crude glycerine went up steadily between March and the end of May, due to heavy world demand. American buyers were priced out of the foreign markets by consumers in Europe and other areas.

When the price of crudes reached a level of 21 cents per pound for soaplye and 23 cents per pound for saponification, a virtual ceiling was reached. Natural glycerine was limited to 30 cents per pound because of the price of synthetic material at that level and prices of other competing products. Further, demand was good, but producers did not want to put stress on it by increasing prices. Producers also indicated that they desired price stability. Hence, the price of crude glycerine found its upper limit. Imports became scarcer because buyers could go no higher and world demand held up. When a little more material was available, principally from Argentina, and world demand subsided, supplies of crude began to show less pressure. Crude glycerine never did get to the point where it was considered in adequate supply. Nor, was it expected to, because soaping operations have been heavily cut into by the development of detergents and were retarded by stocks held by soapers.

Methylamines Reported Steady

The methylamines added steadiness to the organic chemicals market. Demand held steady during a good part of the year and finished off the last quarter at an excellent level. Prices remained firm and were not expected to change. Nitroparaffins were in short supply because production facilities were inadequate for total needs. More production later in 1955 was on the way. Oxalic acid enjoyed a very good radiator cleaning season in the fall and continued to move very well for industrial cleaners. Gluconic acid expanded in use. Epichlorhydrin moved right along to epoxy resins. Producers saw a good market growing for trichloroethylene and perchloroethylene. Acetic acid and carbon disulfide saw a slight bit of recovery from rayon outlets that had been slow.

There were many segments of the trade that saw substantial boosts in activity in the last four to five months, particularly in the late part of the fourth quarter. Solvent demand was very good. Esters, ketones and alcohols moved well. The call from resins was good for glycols, glycerine, PE and formaldehyde. The glycols and amines not only held up, but some were showing very good sales. All led many members of the trade to look at 1955 optimistically.

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Coal Chemicals

—Continued from page 3

phthalic anhydride was developing in Europe, requiring a steady supply of naphthalene for its production. This did not leave a great deal of surplus material to be sold in the American market. The price asked for imported hot-pressed material was also a restrictive factor. As long as domestic production was available and there was no price advantage to the use of imported naphthalene, sales of foreign crude were limited.

In the opening weeks of the first quarter USP phenol was reduced 2 cents, precipitating a similar cut for technical phenol grades immediately afterward. The move also permitted reductions in phenolic resins schedules. It was hoped that phenolic resins and adhesives would enjoy much greater call at lower prices. The volume of phenol sales was fairly good in comparison with past records, but production capacity was increased and more output was due to come in during the year. Several new cumene phenol plants came into production during the year.

Refined 2-degree pyridine was reduced 20 cents per pound in the first week of January in an effort to promote expansion of its uses. This move resulted in the 95 cent l.c.l price which was carried right up to the end of the year. However, it did not induce greater sales as producers had hoped.

Price Cuts Seen Business Spur

This was the extent of price reductions of coaltar products early in the year. In some instances the lower quotations were eventually given credit for having added a little inducement to improve sales levels. The changes in demand levels were subtle and gradual. But, the eventual emergence of spring activity became more evident towards the late part of the quarter and the price concessions certainly did not deter business.

There were a few products, such as the tar acids, that were moving at the beginning of the year without need for lower prices. Demand from tricresyl phosphate was quite good for meta-para fractions. There was a good call for tar acids from aircraft engine cleaners. o-Cresol stocks were better than they had been in former times. Some of the ortho fractions were moving to engine cleaners in tar acid blends. There was also a steady demand from cresylic resins and wire enamels. The latter outlet improved with the pickup in automobile production. Resins continued to be the largest consuming outlet for cresols and cresylic acid.

Benzol, Toluol Supplies Easier

Among aromatics, benzol and toluol were in an easier supply position than they were in 1953. Benzol was in the softer position of the two. Producer and consumer inventories of raw materials and finished products were too high and needed paring. Further, demand from many consuming outlets at the start of the year was not at its best. Cutbacks in the government rubber reserve program weakened benzol demand. More reductions were yet to come from this direction. The call for styrene was lower because of the rubber cutbacks and because of slightly lower call from tire producers. But, benzol moved to styrene for output of polystyrene plastics and for minor use in polyester resins. Needs of synthetic phenol producers for benzol were not very high, but conditions there were expected to improve as spring activity perked up phenolic resins. Benzol-derived insecticides were slow.

Although the benzol market was not entirely bleak, surplus stocks and lower total demand indicated that the situation needed some help. A price reduction for industrial consumers was not regarded as the answer because consumers would not use more than they needed. Some exports and a substantial volume moving into motor benzol channels provided the answer just as it had in many times of surplus in the past. Later in the year, when stocks had been reduced and low production rates resulted from the reduced steel operations, the benzol market actually began to get a little tight once more. But, the situation eased up towards the end of the year as production got back up to high levels.

Toluol was still in a relatively good position in January because a substantial quantity moved to government defense outlets. Nitration needs were cut back from 70 percent to 50 percent of coaltar production in January and February. Industrial demand was strong enough to absorb the rest of the production. But, producers were pessimistic about the day when there would be no defense call for toluol. As it turned out, low steel rates and consequent reduced light oil output prevented any surpluses through most of the rest of the year. And demand from industrial finishes and other solvent requirements was sufficient to hold the market in a balance. Surpluses were evident by year-end, however.

Even though market quotations held up for aromatics, conditions grew more competitive. Producers equalized freight whenever it was necessary to get or secure business. This was true also in the xylol market, which experienced a fairly solid demand through most of the year.

Creosote sales in the early weeks were relatively good and supplies were about normal. However, as railroad freight earnings dropped off, demand lessened for creosote for wood preserving. The "roads" worked largely from inventories and reduced buying for maintenance operations to essentials. This situation held back creosote demand all year. Carloadings started to show some recovery in the last five months but it only improved the potential. Actual sales of creosote were not much better.

Situation in Intermediates

Intermediates were not showing any bright promise early in 1954. There were some materials such as aniline, b-naphthol, anthraquinone, mercaptobenzothiazole and diphenyl guanidine, which moved surprisingly well in the early weeks. Trade sources came to the conclusion that too much inventory reduction at the end of the year had resulted in a little flurry to get stocks for production needs. Demand from textiles had not excited much interest in dyestuff intermediates. Most products like Tobias acid, o-anisidine or p-phenylenediamine were slow. There were some unusually good spots, such as R salt, which moved to dyestuff outlets in the New England area.

Demand for phthalic anhydride started out slowly, well below the large production capacity that had become available. There was a little improvement as movement of alkyd resins and plasticizers increased. Requirements of alkyds for automobile finishes provided a good call until production cutbacks came in late April and early May. Maleic anhydride managed to hold its own ground, not expanding much, but not falling off either. Monochlorobenzene was rather slow all year. a-Picoline moved just as quickly as it was made. The tar base went mostly for the production of vinyl pyridine, but also in one or two other directions, which made it easy to sell all of the small output.

First-Quarter Business Slow

Although there was the normal degree of optimism present whenever a new year is started, business never fully got off the ground in the first quarter. Some materials were just beginning to show the start of spring activity by the end of the quarter. One or two products were even doing quite well in March. But, real improvement did not come to business until later in the year. For the most part, sales of coal chemicals were modest prior to the summer months.

There was not a great deal of change in the markets for these materials in the second and third quarters. Prices were relatively steady. Imported crude naphthalene grew firmer in tone although there was very little offered or sold before the last quarter. Benzoyl peroxide was increased 8 cents per pound in July. No other significant adjustments were made until nonyl phenol was reduced 5 cents late in September. Demand during those months remained firm until summer vacation periods started. A rubber strike in summer reduced calls for many chemicals besides such accelerators as MBTS, DOTG, MBT and DPG. Lower requirements were noted for aniline, b-naphthol, resorcinol and MBMC. Textile activity was slow in general during most of this period, and, therefore, dyestuff intermediates did not show too much inclination to pick up. After the period of summer dullness ran its course, textiles began to show a gradual improvement and demand for

Trend of Coal Chemical Prices

100=1949 Average

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1954												
H.	114.56	114.56	114.56	114.56	114.56	114.56	114.57	114.57	114.57	114.56	114.59	114.59
L.	114.56	114.56	114.56	114.56	114.56	114.56	114.56	114.57	114.56	114.56	114.56	114.59
1953												
H.	113.47	113.24	113.26	113.71	114.14	114.14	114.56	114.60	114.60	114.61	114.61	114.59
L.	113.47	113.22	113.22	113.26	113.71	114.10	114.21	114.57	114.60	114.61	114.59	114.59

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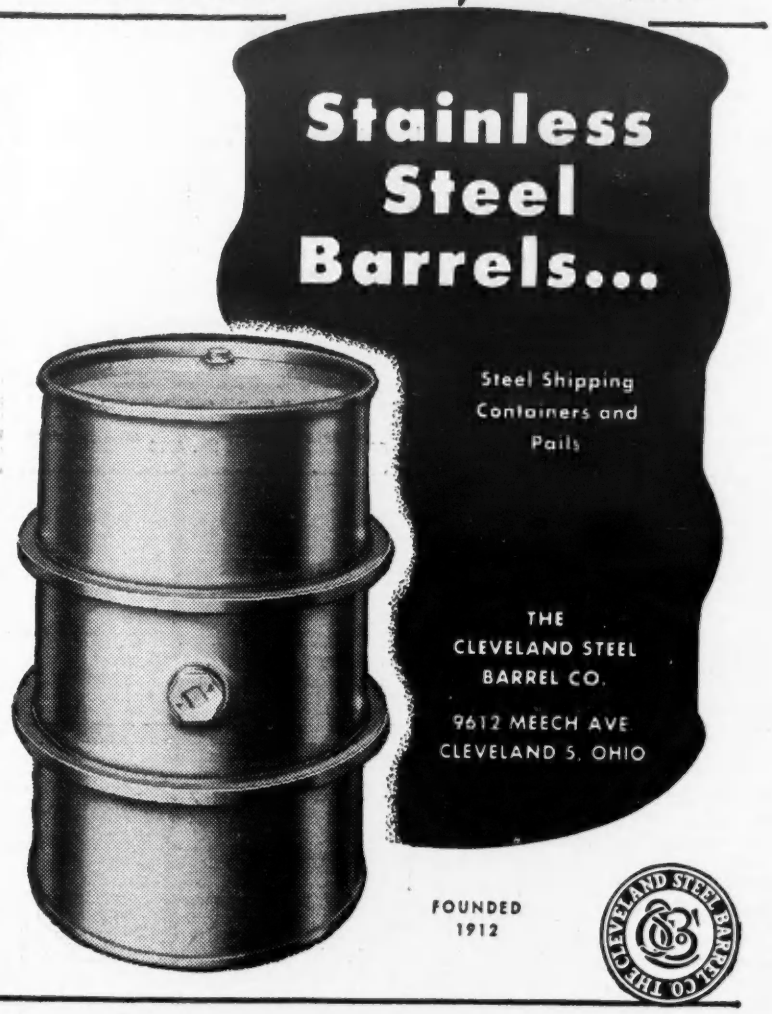

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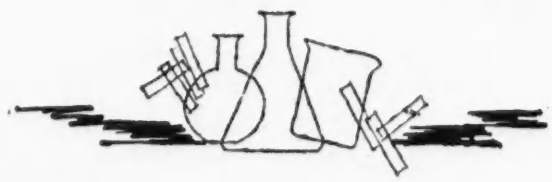

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most dyestuff intermediates was boosted accordingly.

At the same time, intermediates got active because textiles improved too. General business moved right along with the firmer tone. Temporary influences of a truck strike and the elections in November clouded the general direction only briefly. The local truck strike in the metropolitan area was postponed several times and boosted deliveries, in many instances, each time. Although demand in the following weeks was expected to suffer, the rush buying never did seem to hurt later sales much. Markets appeared to reach a status quo prior to the elections. However, demand in the late weeks of November really started to improve,

Automobiles reached a very high production peak. The steel rate passed levels which some sources never expected to see reached in 1954. The rubber industry got into high gear and busied itself with the production of tubeless tires for new cars and replacement shoes. The automobile industry also required a great deal of rubber for such items as gaskets, bushings, mountings, hard rubber casings and window channels. Higher steel rates brought increases in cokeoven production and more output of coaltar chemicals, some of which was welcome and some of which was not.

Crude naphthalene stocks were pinched by low output rates and poor yields of the summer. The price was watched closely in the last quarter because of this fact, and finally the announcements of higher prices for January, 1955 were made. Crude imported material had already come up to and surpassed domestic naphthalene in price. Increased output brought more tar acid production, which was readily moved oy the well sustained demand. Tar acids were one of the brighter spots for some producers all year.

Essential Oils, Aromatics, Flavorings

Last year closed with prices on a generally strong tone. The overall price trend during 1954 was toward firmness, most particularly in those essential oils which are imported. According to trade sources, 1954 was rated as an active trading year, with the essential oils business enjoying a good volume. Despite the restrictions still in force in several countries regarding the importation of goods from dollar areas, the export market for essential oils, particularly those of American origin, was quite active. Other factors contributing to the strength of the export demand were improved economic conditions abroad and the lessening of restrictions by some countries on importations from the United States.

With respect to those oils of Chinese origin, anise and cassia, supplies continued to shrink in 1954, with virtually no hope of any improvement. Anise oil has not been imported into this country in more than two years due to a government embargo on imports from Red China. While small stocks of anise oil were said to be still available, once these are exhausted there will be no more available.

Oil of Cassia Supply

Oil of cassia has also not been brought into this country for some time and the supply situation is substantially the same as with anise. Stocks are just about completely depleted. Meanwhile, from Europe there were reports that cassia oil had become a drug on the market there due to the loss of the American market. As a result, some Chinese dealers would not sell anise oil without a tie-in sale on cassia oil.

Many customary factors affected essential oil prices last year. Weather, crop diseases, political tensions and fluctuations in international economy were some of the most potent. A civil war in Guatemala in the early part of last year was responsible for curtailing an already limited production of lemongrass oil in that country. The depressed state of lemongrass oil prices had been instrumental in causing a cutback in plantings last year so that the crop really would have been smaller than in years previous. Added to this limiting factor was the damage to last year's crop as a result of the civil war there. Two years ago Guatemala shipped 650,000 pounds to this country, while in 1953 the total was 150,000 pounds. Shipments in 1954 were expected to approximate one-third of those in 1953.

India Ships Lemongrass Oil

As a result of the virtual loss of Guatemala as a source of supply, India was called upon to make up the deficiency. According to trade reports, more lemongrass oil was shipped to this market in the first nine months of 1954 than in any previous full year, with the possible exception of 1949. Prices more than doubled in the spot market in 1954. It was anticipated that Guatemalan production would be higher this year, but the first of the new crop will not be distilled until later in the year.

Oil of citronella was another important essential oil, supplies of which were quite short for the better part of the year. Spot prices doubled during the year and at the year-end were quite firm. Java was never expected to regain its former prominence as a supply source. The damage done to plantations by the last World War and the continuing disruption there caused by guerrilla warfare precludes this possibility, it was said. Production of citronella oil in Guatemala was virtually non-existent and not likely to recover in any notable degree in the near future.

Citronella Oil Situation Detailed

Formosa and Ceylon supplied the bulk of the citronella oil to this market last year. It was reported early in the year that shippers in Formosa had oversold on last year's production, with the result that there was considerable scrambling among dealers seeking to cover contact commitments by buying on the open market. Production in Formosa in 1954 was reported at about 1,600 tons, a substantial decline from the 4,000 tons produced in 1951. The diversion of manpower in Formosa into the Chinese Nationalist army based there has reduced the labor force available for production of non-food crops. The overhanging Red Chinese threat has resulted in a very firm price situation. Spot prices doubled in this market in 1954. By the year's end the spot market eased somewhat, a phenomenon attributed more to a temporary lull in demand, rather than to any real improvement in supply.

The camphoraceous oils were in tight supply during most of 1954. The supply situation on these items appeared hopeless. Not only has production of these by-products of natural camphor been drastically curtailed due to a lack of demand for gum camphor, but the small amount that was produced was said to have been largely kept for local consumption in Formosa and Japan. In order to conserve foreign exchange, consumers in these countries used locally-produced camphor oil rather than imported odorizing agents from abroad. The supply situation in camphor oils was expected to continue to tighten in 1955 with the almost certain possibility of higher prices.

French Lavender Oil Advances

Oil of French lavender flower advanced very sharply in the latter part of 1954. A very short lavender flower crop resulted in curtailed production, with prices soaring in France. It would appear that the market might ease somewhat since consumers have been very reluctant to buy on a more than hand-to-mouth basis at current market prices.

Bois de rose oil was firm at the year-end. It was said that a substantial share of the 1955 production had been contracted for. The price of Brazilian bois de rose oil advanced moderately last year. Ocotea cymbarum, an important camphoraceous oil, was in tight supply during most of last year, since camphor sassatrassy and camphor white oil were very scarce. No appreciable improvement in supply was anticipated in the near future.

The citrus oils group was in better supply throughout most of 1954 than it had been in preceding years. Lemon oil, the most important item in this group, was in excellent supply for the first time in years. A bumper lemon crop was held responsible for this welcome improvement and prices declined appreciably during the year. Orange oil was also plentiful, as was lime oil. Prices dropped substantially on these oils in 1954. West Indian lime oil prices started to weaken

Trend of Essential Oil Prices
100=1949 Average

	1954											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	148.99	146.01	147.93	147.93	147.28	137.64	137.92	137.97	138.10	138.54	138.70	138.80
L.	145.14	145.14	146.01	147.87	137.74	137.54	137.64	137.90	137.92	138.10	138.54	138.25

	1953											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	166.00	161.48	160.36	159.15	154.60	153.75	153.03	151.47	150.64	147.70	147.49	149.91
L.	163.42	160.81	158.02	154.27	154.39	152.56	151.40	150.65	144.61	144.59	145.75	145.86

at the year-end. As a result of overproduction in Mexico, and the currency reform in that country last year, prices of Mexican lime oil declined considerably. It was understood that England had bought substantial quantities of Mexican lime oil to the detriment of the West Indian lime oil market.

Rise Seen in Citrus Oils

This spring should see an advance in most of the citrus oils when normal seasonal demand picks up. The damage wrought in Haiti last September by hurricanes was considerable and, as a result, little production of lime oil was expected until possibly May or June, 1955. Bergamot oil was in reasonably good supply throughout 1954 and the year-end saw prices easing.

With regard to oils of domestic origin, the mint oils were probably the most interesting performers. Final estimates of the Crop Reporting Board show the production of mint oil in the United States during 1954 at 2,410,000 pounds, valued at $11,540,000. Production was about 9 percent over the 1953 outturn of 2,266,000 pounds and value was about 7 percent over the 1953 crop value of $10,787,000.

The increased production was due largely to a slightly larger area cultivated last year and to a yield per acre that was somewhat higher than the preceding year and considerably above average. The area planted in 1954 amounted to 59,200 acres as compared with 57,650 acres in 1953, and yield per acre was 40.7 pounds of oil as against 39.3 pounds in 1953 and the 1949-52 average of 36.1 pounds.

Peppermint Oil Prices

Peppermint oil prices hit their peak about the end of September and last-quarter activity was characterized by some easing from peak levels. Virtually all of the gain in production of mint oils was in spearmint oil. Production figures showed a total of 948,000 pounds turned out last year compared to 820,000 pounds in 1953, an increase of 128,000 pounds, while the gain in peppermint oil production over the preceding year was only 16,000 pounds. There appeared to be some shortage of high-test peppermint oil, while the spearmint oil market ended the year on a weak note. The favorable market price of spearmint oil as compared with the relative high price of peppermint oil was credited with causing a substantial surge in demand for the former.

Cedarwood oil was in tight supply for the better part of 1954. Production capacity was said to be unable to keep up with consumer requirements. The terrific demand for cedarwood oil and the subsequent steady rise in the market price induced shippers from Kenya, Africa, to make offerings in the market here. The supply outlook for the first part of 1955, at least, was for a continued shortage in supply.

Dillweed Oil Output Curtailed

Dillweed oil production last year was curtailed due to very bad weather at the time of distillations of the crop. Consequently, not only the yield, but quality, was reduced. There was some shortage in high-test oil and prices had begun to advance by the year's end. Consumer demand in 1955 was expected to push the market higher. With the coming of the new crop late last year, wormseed oil prices tended to decline at first but strengthened toward the close. The carryover from the preceding crop was said to be quite small and the outlook for the coming year was for continued stability.

Last year was one in which the numerous price advances in essential oils were paced by proportionate rises in aromatic chemical derivatives of these oils. Affected by rising raw material costs were citronellal, citronellol, hydroxy-citronellal, anethole, safrol, heliotropin, linalool, geraniol and derivatives of these compounds. The spot market advanced steadily on citral, which is made from lemongrass oil. As we have seen, that oil doubled in price during the year. Citral has been in steady demand in recent years as the starting material in the synthesis of vitamin A. Demand for this product has soared in the past few years, virtually displacing natural vitamin A in all but a few instances.

Citral From Acetylene

Manufacturers of aromatic chemicals have long striven to free themselves of dependence upon natural raw materials and have directed considerable research to the problem of finding other commercially feasible routes to the synthesis of these compounds. Hence, considerable enthusiasm was aroused last year at the news that a commercial method had been worked out for the production of citral—the starting point being acetylene, a basic chemical produced by the petroleum processing industry. Judging by all reports to date, synthetically-produced

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citral should come on stream sometime this year.

The seeds and spices market had its share of activity last year. Overall, business was estimated to have been off slightly from 1953 levels. The pepper market underwent severe fluctuations. From a price of about $1 for Malabar pepper at the beginning of the year, the market dipped to half that figure by July. By September the market had re-advanced to the January price level. This was temporary, however, and the last quarter saw prices decline to the low for the year, which was in the vicinity of 40 cents. Black pepper imports last year were estimated to have exceeded the preceding year's total by about 25 percent. This, of course, was a key factor in the market during most of the year. Consumer preference in 1954 seemed to tend toward Lampong and Malabar varieties at the expense of Sarawak.

Ginger prices doubled during 1954, reflecting the short crops that year, while cloves tended to weaken slightly. Clove production during the 1954-55 crop year in Zanzibar and Pemba has been estimated at about 5,500 tons. This was down considerably from the previous crop, which yielded 20,019 tons. Large year-to-year fluctuations in volume were said to be characteristic of the East African clove production. The trees appear to require some time to recover from the effects of a large crop and the accompanying branch-breakage resulting from harvesting operations. Zanzibar government authorities were reported to be stressing the need for more care in harvesting procedures and, in an attempt to replace aging and consequently less productive trees, have encouraged the plantation of seedling trees.

Other price trends among seeds and spices last year were a substantial decline in Indian celery seed and a precipitous rise in the pimento (allspice) market. A short crop in Jamaica was expected to affect this market for a good part of the coming year. The situation got so out of hand in 1954 that the Jamaican government was forced to step in and set prices and quotas in order to forestall a continuance in the price rise and the possible loss of a portion of this market to other cheaper spices. A pertinent factor in the pimento shortage last year was the fact that Russia came into the market in the early part of the year for a substantial purchase of Jamaican pimento. This action depleted stocks substantially.

Vanilla was perhaps the most spectacular performer in this group last year. Prices advanced over $3 per pound and the end was not in sight, according to trade sources. World production of vanilla in 1955 was expected to fall substantially short of expected consumption. The markets at origin have been consistently very firm, consumer resistance in the spot market notwithstanding.

Textile and Leather Chemicals

Volume of business in textile and leather chemicals in 1954 was reported as moderate to good by trade sources and in some materials showed slight improvement over the previous year. Consumers continued to absorb supplies as required and bulk of sales was booked for delivery within thirty days. Buyers, as a rule, showed little inclination to build inventories, as stocks were ample and replacements were obtainable for immediate and prompt needs. Prices were unchanged to slightly lower, as indicated by the average price index figure of 94.08 at the close of 1954, compared with 98.70 for the same time in 1953.

A feature of the sizing materials market was the unchanged quotations of corn starch and corn dextrin which ruled throughout 1954 and 1953. Pearl corn starch was maintained at $7.14 per 100 pounds, paper bags, carlots, New York delivery. The use of this material in 1954 was greater than in the period 1935-39, according to data released by the Department of Agriculture. The increase was particularly marked in both food and non-food, rather than in packaged items reaching the consumer direct. The greatest increase in starch consumption was in paper and related products, due to the higher cost of competing materials. All grades of corn dextrin also were quotably unchanged during the past two years.

Price Movements Tabulated

The following table indicates high and low prices for 1954, per pound, and on

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Tanning Materials

	High	Low	Dec. 31
Chestnut ext., liq. tanks	$0.0440	$.0.04	$0.04
Cutch	.08½	.08½	.08½
Mangrove bark, Afr., ton.	$77.00	$69.00	$69.00
Myrobalans, J1, ton	$48.50	$47.50	$47.50
Quebracho ext., ord	.11 31/64	.11 21/32	.11 31/64
Valonia cups ....ton.	$56.00	$44.00	$44.00
Wattle bark, fair average ton.	$100.00	$98.00	$98.00
Extract, 60 tannin	.10	.09¾	.10

Sizing Materials

Corn dextrin, white	.0853	.0853	.0853
starch, pearl	.0714	.0714	.0714
Egg albumen, flake	$2.02	$1.27	$1.30
Yolk	$1.48	$1.02	$1.02
Potato starch, Maine	.07¼	.05¾	.0615
Sago flour, raw	.07	.06½	.06½
Tapioca flour, spot, Braz.	.13	.08½	.08½

Potato starch remained on a steady basis throughout 1954. Price fluctuations were narrow, ranging about one-half cent from the high and low for the year. Production was not burdensome, with consumers absorbing the bulk of output in Maine and Idaho during the major portion of the year. Demand for imported starch was not as heavy as the previous year as domestic material was generally available at below the cost of foreign starch.

Consuming demand for tapioca flour in 1954 was active for Java and Siamese grades because their cost was lower than Brazilian. Prices of Brazilian were higher than Far Eastern flour, which resulted in users taking the bulk of requirements of the latter. The cost of new-crop Brazilian was cut sharply, dropping to 7½ cents per pound, exdock, but lower prices did not improve demand as Siamese and Javanese were cheaper.

Egg Derivatives Lower

Price trend of egg derivatives was lower during the year, due to heavy production and lower cost of eggs. Prices of egg albumin and yolk dropped drastically during the year. Flake in January was held at $2.02 per pound, spot and declining steadily to $1.30 per pound at the end of the year. Egg yolk also declined sharply from $1.48 per pound in January and to $1.02 per pound in December.

Egg production in 1954 topped the record set in 1953 and totaled 64,600,000,000, 5 percent higher than the previous 1953 high of 61,700,000,000. The ten-year average was 116,379,000,000. However, at the close of the year, the government noted a slowing down in output. Sago flour trading was moderate. Consumers limited purchases to prompt requirements, with prices denoting little change for the year. The high was 7 cents per pound, exwarehouse, and declined to 6½ cents during the latter part of the year.

In the chemical group, most items were maintained at unchanged levels due to the high cost of labor and freight rates. Bichromates moved in good volume at unchanged quotations. Production was restricted to consumer requirements and were ample throughout the year. Sodium acetate also was quotably unchanged and moved in fair volume for prompt requirements. In mid-summer hydrogen peroxide was lowered by producers and 35 percent was reduced to 18 cents per pound, in tankcars, effective July 1. This was the first price reduction in two years.

Sodium Formaldehyde Sulfoxylate

Lower production costs also were reflected in sodium formaldehyde sulfoxylate, which declined to 71 cents per pound, drums, carlots, f.o.b. works, during the first half of the year and ruled steady and unchanged during the balance of the year. Sodium hydrosulfite moved in good volume during the year, though consumers confined purchases to prompt delivery. Prices ruled steady until December when producers dropped the market 1½ cents per pound, to 21½ cents per pound, drums, carlots, works, and, at the close, makers announced another of 1½ cents reduction, effective January 1, due to lower cost of basic materials.

While trading in tanning materials showed slight improvement in volume in 1954 than the previous year, business was still below normal volume, according to trade sources. Tanners confined purchases to actual needs, keeping inventories low. Leather tanning continued affected by the increased use of leather substitutes and tanneries operated well below capacity during the major part of the year. During the last quarter of the year, some improvement in demand for foreign tanning materials was noted, but the volume of actual business was limited to nearby shipments for replenishment of low inventories.

Slow business resulted in a steadily downward price trend for most materials. The exceptions were cutch and quebracho extracts. There was a break in quebracho extract prices in July, when the method of quoting shipments was changed to a guaranteed tannin basis, which reduced the cost to consumers about $4 per ton for each tannin point. Some importers refused to sell on the new basis, which resulted temporarily in two sets of prices. Business was placed at the lower levels, thus reducing the profit to sellers. In August the market became stabilized and prices reverted to the former level for ordinary solid, guaranteed 63 percent tannin at 11 31/64 cents per pound, exdock, plus duty, and clarified 64 percent tannin at 12 3/16 cents per pound, same basis. Offers of cutch continued light during the year, with shipments pegged at 8½ cents per pound, exdock, plus duty.

Demand was quite active and exceeded available supplies.

The largest decline in 1954 occurred in valonia cups. Early in the year shipments were offered at $56 per ton, exdock, and were available at $44 per ton at the end of the year. Mangrove bark also was sharply lower. African bark declining from $77 per ton, exdock, to $69 per ton. Myrobalans remained fairly steady, declining only $1 per ton. Wattle bark was slightly lower, dropping $2 per ton, while the extract was off ¼ cents per pound. Domestic producers of chestnut extract reduced prices fractionally in mid-year to meet competition of the imported material.

Hide Situation Described

The domestic hide market defied an increase in imports of foreign hides last year. Exports of hides from the United States totaled about 4,500,000 more hides than were imported, which was a record and doubled the 1953 total. Prices, however, were only about 5 percent above the thirteen-year low reached in December, due mainly to the heavy cattle slaughter.

Production of shoes and leather was disappointing in 1954 due in the main to the heavy carryover of stocks and only normal consumer demand. Estimates of footwear production in 1954 ranged from 515,000,000 pair to 525,000,000, compared with 535,000,000 pairs in 1953. The shoe industry spent the first half of 1954 clearing 1953 inventories. Not until late in the year were buyers ready to replenish inventories.

The year 1954 was one of adjustment in the textile industry. Surplus inventories from 1953 were materially reduced and the industry geared production to smaller demand. Production curtailment during the first half of the year cut the output of cotton goods by 258,000,000 linear yards; rayon and acetate goods by 240,000,000 yards and wool goods by 47,000,000 yards. At mid-year buying improved and part of lost yardage was regained in the last half of the year. Japan in 1954 shipped substantial quantities of cotton and rayon goods.

Imports of wool goods from Great Britain and Italy also were liberal and in apparel fabrics accounted for more than 5 percent than the total consumed.

Nylon Cloth Production

Although rayon and acetate fabrics showed a decline, other man-made fabrics made material gains during the year. nylon cloth output production in the first half of the year was at a rate of more than 90,000,000 yards in each quarter, compared with an average quarterly production of 79,000,000 yards in 1953. Similar gains were noted for other non-cellulosic fabrics, namely glass fibers and acrylics. Wool made a poor showing in 1954, with total worsted and woolen cloth production down below 300,000,000 yards, a total lower than any year since before World War II.

Shipments of rayon and acetate filamant yarn and staple during January-November, 1954, inclusive totaled 1,000,500,000 pounds, about 8 percent below the same period in 1953, according to Textile Economics Bureau. While shipments began to pick up in the latter months of the year, it appears certain that final results will be lower than 1,168,700,000 pounds shipped during the whole year of 1953 and considerably below 1,268,500,000 pounds in the peak year of 1950.

Trend of Textile & Leather Chemical Prices

100=1949 Average

	1954 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	98.71	97.96	97.57	95.64	95.64	95.80	95.79	95.59	94.62	94.56	94.56	97.09
L.	97.89	97.87	95.52	95.24	95.62	95.80	95.59	94.62	94.56	94.56	94.08	94.08

	1953 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	102.12	103.09	103.09	103.09	103.11	101.18	99.99	99.57	98.56	98.73	98.73	98.71
L.	101.15	102.12	103.09	103.08	101.17	100.76	99.55	98.52	98.52	98.54	98.70	98.70

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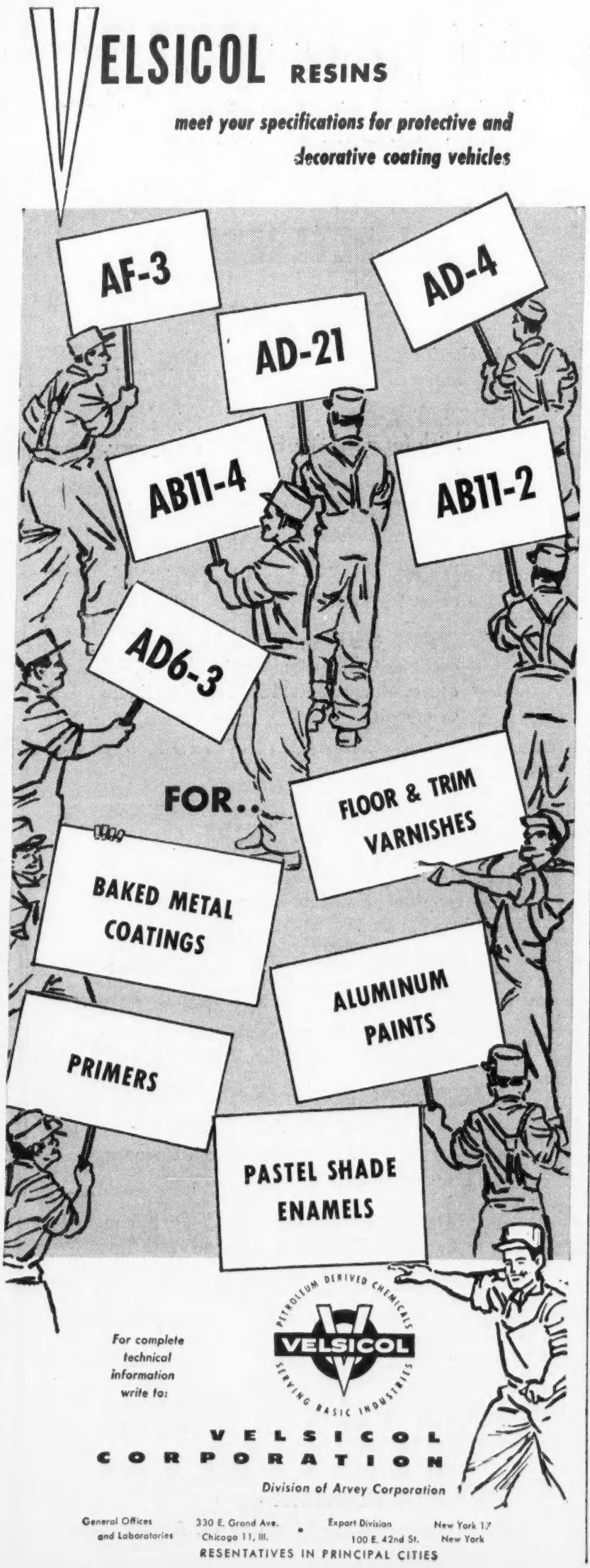

Protective Coatings Materials

—Continued from page 3

trusion of thermoplastics actually showed a slight gain in sales volume.

Phenolic molding compounds suffered the greatest decline, off approximately 23 percent, according to production statistics covering the first ten months of the year.

Thermoplastic molding compounds based on Tariff Commission figures were off as follows:—Cellulose, 4.3 percent; polystyrene, 4.7 percent, and vinyls, 4.8 percent. On the other hand, miscellaneous molding materials, including polyethylene, were up 35 percent.

Vinyl resins, including resins used for the production of film, sheeting, molding powder, flooring and protective coatings, were off approximately 3.4 percent for the first ten months of the year. However, the recovery started in September, continued throughout the rest of the year. As an example, thermoplastic consumption moved up more than 15 percent in November, as compared with the same month the previous year. Thermosetting sales also moved up, going to within 2½ percent of their November, 1953, totals.

Process of Vacuum Forming

The process of vacuum forming thermoplastic sheets, made considerable strides in 1954 and this area of the industry ended the year with a period of further growth a certainty. The appliance field is using increased quantities of vacuum-formed items such as liner panels for freezer units and inner panelling for refrigerators.

Consumption of urea plastics was boosted by public demand for ivory electrical wiring, switches and sockets. As excellent electrical insulators, urea resins were slated for even greater demand for this purpose. Urea molding compound usage was up 7 percent in closures for cosmetic, drug and other containers because of its inertness and resistance. For liquid urea glues, sold for plywood manufacture and general woodworking purposes, a modest increase in sales was noted. Although industrial sales of dry urea, having similar applications, were not expected to show a corresponding gain, retail sales were sharply increased.

Lead Pigment Pricing

Lead pigment prices followed the action of the metal closely in last year's extremely competitive market. The oxides dropped the third week in January, following the metal. Demand for lead pigments during that month was only moderate, except for some white leads, which were in fairly active call. Most pigment buyers, however, took supplies in a hand-to-mouth manner, working with small stocks. An advantage of this situation, it was pointed out, was a stabilizing effect, since the market remained active because of the greater frequency of purchases.

A further drop in the metal brought lead oxides, monosilicates and orange mineral down during the second week of February. A month later, lead monosilicate, red oxides, litharge and orange mineral moved to firmer positions. Trading in all prime pigments was reported higher in March than in February.

Lead oxides moved up the first of April. Further increases were effected during the middle of the month, when basic carbonate and basic silicate white lead went up, along with oxides and monosilicate. The following month was devoid of price activity for lead pigments, but the first week of June saw white and red lead, litharge and orange mineral advanced. The pig lead market dropped during the third week of June, owing to the government's unwillingness to buy for stockpiling. Monosilicates, red lead, litharge and orange mineral were lowered.

Truck Strike Threat

Lead oxide moved up at the end of August. Pigment sales were stimulated at this time by the threat of a truck strike in the New York area. Monosilicate red and white lead became higher during the second week of September, and the following week the oxides followed.

Lead metallic paste was increased at the end of September and again the first of October, due to the cumulative effects of pig lead advances. Basic white carbonate and silicate also moved higher. Dry red leads, litharge, lead monosilicate and orange mineral were advanced during the second week of October. These proved to be the last changes effected during the year.

Zinc dust prices were keyed to the metal. The first change in quotations occurred toward the end of January, when prices fell. The market was stable during February, and became firmer in March, with advances occurring near the middle of the month. Further advances were made the first of April, and again the first of June. Prices were stable

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throughout the summer, and moved up again in the second week of September.

Leaded zinc oxides firmed during the second week of October, because of advances in the lead market. Other zinc pigments were quiet. For the balance of the year quotations remained unchanged.

Phthalocyanines Dropped in Price

Prices for pigments other than lead and zinc made fewer price movements throughout the year. Green and blue phthalocyanine pigments and tungstated colors were reduced in January due to a drop in sodium tungstate. Later that month red vermillion went up, following an advance in mercury. Cadmium reds and oranges went up toward the end of January because of higher prices for selenium. However, when cadmium metal prices went down the first of February, cadmium colors were placed in an unsteady position. Finally, at the end of the month, cadmium yellows and orange dropped. Cadmium lithopone pigments containing selenium remained unchanged.

The persistent upward movement of mercury prices brought about a rise in yellow mercury oxide the first week of May, and a further increase during the third week. Bone black prices were raised the first of July because of increased freight and labor costs. Antimony oxide firmed at this same time.

Demand for carbon blacks suffered during August when strikes shut some rubber plants. Prices remained stable, however. Consumption turned upward in September when some of the plants reopened. Green pigment B paste prices rose the first week of September. Later that month the continued spiral in mercury prices brought a further advance for yellow mercury oxide. The broadest price changes in pigments were announced in December, to become effective January 1, 1955. Advances were scheduled for a wide list of organic and inorganic colors, including benzidine and chrome yellows, iron blues, molybdated oranges, toluidine reds, umbers and zinc yellows.

Supplies of pigments were generally adequate throughout the year with the exception of colors using selenium and nickel. Government needs for these metals were such that civilian supplies proved inadequate and producers were unable to obtain anywhere near the amounts desired. At the end of the year no slackening in pressure was in sight.

Price changes among natural resins and lacquer materials were mainly downward. Dioctyl adipate was lowered at the first of the year. Supplies were found to be more plentiful, due to the continually easing supply situation for adipic acid. Phenolic and polyester resins and dibutyl tartrate moved down during January. Reductions in sebacic acid made possible price cuts in the sebacates. The month's list of materials reduced also included melamine resins and ureaformaldehydes.

During March, the plasticizer market was featured by price competition. Established price schedules were not lowered, but there were some reports in the industry of material offered at reduced rates. A wide list of materials were reduced the first week of April, including dioctyl phthalate, di-iso-octyl phthalate, dicapryl phthalate, di-iso-octyl sebacate, dioctyl adipate, dioctyl sebacate and dihexyl sebacate. The moves were expected to stabilize the market in regard to pricing. Toward the end of the month, prices were lowered for dibutyl and di-isobutyl phthalates. Some pressure on diethyl and dimethyl phthalates was noted, due to weakness in the alcohols market.

Shading on DOP and DIOP

During May, the plasticizer market was considered unsteady as a result of continuing reports of price shading on DOP and DIOP. The main pressure on these plasticizers was thought to be the difference in price for 2-ethylhexanol and isooctanol. Alcohols also continued to exert some influence on diethyl and dimethyl phthalates.

Some raw materials were reduced during the first half of June, notably pentaerythritol and formaldehyde, but there were no immediate changes in the prices of the resins. Alkyd resins moved up from some sources on contract July 1 because of the continuing high cost of soybean oil. Other producers joined later in the month. Competition remained active because of the large number of producers. There was a flurry of price reductions in plasticizers, with dibutyl, dicapryl, dihexyl, di-iso-octyl and dioctyl sebacates down. Buying was found to be stimulated by the cuts.

The final reductions of the year for DOP, DIOP and dicapryl phthalate took place at the end of August. The new prices were considered more realistic in the face of keen competition.

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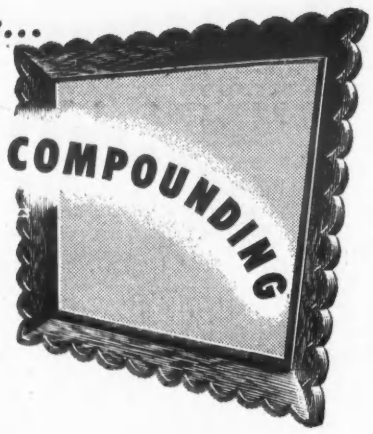

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Oils, Fats and Waxes

Conditions in the oils and fats market in 1954 showed moderate improvement over 1953 in business volume and prices. The indicated price index for oils, fats and waxes stood at 113.32 at the end of 1954, compared with 101.39 a year previous. Consumers continued to limit purchases to prompt requirements throughout the year and showed little inclination to build inventories or buy for forward delivery. However, total sales were above the volume of 1953, according to trade sources.

Among edible vegetable oils, prices of cottonseed, peanut and soybean oils were fractionally higher at the end of the year, than at the same time in 1953, especially peanut oil which was scarce due to the drastic reduction of the peanut crop. The cottonseed oil market improved in tone late in the year, as a result of a sharp reduction in government-owned oil, which was moved in heavy volume for export. Official reports indicated that the government held uncommitted stocks of about 300,000,000 pounds of cottonseed oil at the close of 1954 compared with over 1,000,000,000 pounds a year earlier.

The Department of Agriculture reported the volume of futures trading in farm products in 1954 was about the same as 1953. Officials stated that trading in cotton, corn and wheat dropped in 1954, but increased in soybeans, soybean oil and lard. A record total of more than 6,100,000,000 bushels of soybean futures were traded, reflecting the wide price ranges and increased speculative activity. Hedging in soybean futures also increased considerably.

Key High-Low Prices in '54

The following table indicates the high and low prices for 1954 and on December 31, 1954, per pound, in tankcars. New York basis, unless otherwise specified:—

Oils:—	High	Low	Dec. 31
Castor, dehyd., bodied	$0.2260	$0.2260	$0.2160
tech., No. 3	.17¾	.16¾	.16¾
Coconut, crude, Pac. coast	.16½	.11¾	.12⅜
Corn, crude, mills	.15	.13	.13¼
Cottonseed, crude, South east	.14⅞	.12	.13⅛
Linseed, raw, Minneapolis	.1600	.1200	.1200
Menhaden, crude, works.	.08¼	.03⅜	.08¼
ref., light pressed	.11	.09½	.11
Oiticica	.17½	.15	.15
Oleic acid, single dist., bgs.	.15	.13	.15
Oleo, dms	.22½	.16½	.17½
Olive, edible, dms., gal.	2.35	2.15	2.25
Palm, dms	.1300	.1240	.12½
Peanut, crude, mills	.22	.16¼	.19½
Rapeseed, ref.	.17½	.16½	.17
Sardine, crude, Pac. Coast	.06¾	.08½	.03⅜N
Soybean, crude, mills	.15⅜	.11⅞	.12⅞
Tung, imported	.23⅞	.20½	.21¼
dom., mills	.24½N	.21¼	.21¼
Miscellaneous—			
Copra, Pac. Coast, ton	$220.00	$155.00	$172.50
Cottonseed meal, mills, ton	$78.00	$54.00	$73.00
Grease, yellow	.07⅝	.05⅝	.07⅝
Lard, trcs., Chicago	.2138	.12¾	.12¾
Linseed meal, ext., Minn.	$80.N	$55.00	$68.00
Stearic, acid, single pressed, bgs.	.13¾	.11¾	.13¼
Soybean meal, Decatur, ton	$105.00	$59.00	$88.00
Tallow, fancy, dlvd	.08¾	.05	.08⅜
Wax, carnauba No. 3, crude, bags	.86	.70	.70
No. 1, yellow, Ceara, bags	$1.19	$1.02	$1.03

N—denotes Nominal.

Soybean Crop at Record

Soybean crop estimate indicated a new record in 1954, totaling 342,795,000 bushels, compared with 268,528,000 bushels in 1953 and ten-year, 1943-52 average of 230,649,000 bushels, according to USDA. Trading in soybean oil was active during the year and market was firmer than in 1953. Crude soybean oil reached the high of 15¾ cents per pound, tankcars, f.o.b. mills, in August, due to scarcity of old crop beans. The low was 11⅞ cents whereas in 1953, the high was 13⅞ cents and the low, 10 cents. Farmers withheld beans for prompt delivery during the major portion of the year, which at times affected the production of oil and meal. Soybean meal reached the high of $105 per ton, bulk, Decatur, in the first quarter, reflecting the increased cost of beans. This was the highest price since August 1947.

Supplies of oilseed cake and meal available for feeding in 1954-55 were expected to be the largest on record, totaling around 9,200,000 tons, about 600 tons larger than in 1953-54, according to the Agriculture department. The record bean crop this year and the prospective record production of soybean cake and meal was largely responsible for the big supply. Soybean meal available for feeding was expected to be around 6,000,000 tons, or more than one-fifth larger than in 1953-54 when it was the smallest in recent years.

On the other hand, the quantity of cottonseed cake and meal probably will be around 400,000 tons below the big supply of nearly 2,900,000 tons fed in 1953-54. The supplies of linseed and copra meals were expected to be about the same as last year and peanut meal the smallest in recent years. The imports of oilseed cake and meal in 1954-55 probably will be at least as large as last year (168,000 tons) and the October 1 carry-over was considerably larger. Hence the total supply of all oilseed cake and meal for 1954-55 was expected to be around 9,700,000 tons, the largest on record and 6 percent larger than in 1953-54, according to the department.

Terms and conditions under which the Department of Agriculture would purchase cottonseed oil, cake or meal, and linters from crushers to implement its 1954-crop cottonseed price support program were announced in July.

Crushers participating in the program had to agree to pay to ginners not less than $54 per ton for basis grade (100) cottonseed f.o.b. gin point, with specified premiums and discounts for other grades. The new part of the program stipulated that for each ton of cottonseed purchased, CCC would buy the following quantities of crude cottonseed oil, 41 percent protein cake or meal, and linters as a "package" in the specified areas:—

Southeastern area—309 pounds of oil, 881 pounds of cake or meal, and 197 pounds of linters; Valley area, 327 pounds of oil, 877 pounds of cake or meal, and 180 pounds of linters; Texas-Oklahoma area, 316 pounds of oil, 954 pounds of cake New Mexico, 345 pounds of oil, 870 pounds of meal, 172 pounds of linters; Arizona-of cake or meal and 179 pounds of linters; California area, 337 pounds of oil, 916 pounds of cake or meal, 208 pounds of linters.

The following schedules of prices were paid by CCC:—

Oil—Prime crude cottonseed oil, the base price per pound, basis f.o.b. buyers' tankcars at crushers' mills:—Southeastern, 13.125 cents; Valley, 13 cents; Texas-Oklahoma, 12.75 cents; Arizona-New Mexico, 12.75 cents; California, 12.75 cents.

Cake or meal—For 41 percent minimum protein content, basis hydraulic or expeller bulk meal or cake, f.o.b. sellers cars at crushing plant:—Southeastern, 2.90 cents; Valley, 2.80 cents; Texas-Oklahoma, 2.80 cents; Arizona-New Mexico, 2.75 cents; California, 2.75 cents.

Linters—For mill run linters, sold on a cellulose basis or second cut chemical linters, 3 cents per pound gross weight, basis 73 percent cellulose yield. Premiums and discounts of .04 cent per pound for each variation of 1 percent, fractions in proportion, of cellulose yield from 73 percent.

Department of Agriculture in August announced unchanged domestic sales policy for cottonseed oil during the period September 1, 1954, through August 31, 1955. Crude cottonseed oil to be sold for domestic use at market price but not less 15 cents per pound prime, Valley basis, f.o.b. tankcars or tankwagons at producers' mills, and refined at market price but not less than the minimum crude price, with appropriate adjustment for refining, location and quality f.o.b. tankcars or tankwagons at points of storage locations.

The mandatory use of a cotton linters factor as a part of the official grading system for cottonseed sold or offered for sale for crushing purposes was postponed to June 1, 1955, by the Department of Agriculture. An earlier amendment provided that use of a linter factor would begin June 1, 1954. The grade standards which were in effect during the past season, providing for the optional use of a linters factor of 2.5, will be in effect until June 1, 1955.

Flaxseed Production in 1954

Flaxseed production in 1954 was forecast at 41,534,000 bushels by the Department of Agriculture. This compared with crop of 36,663,000 bushels in 1953 and ten-year 1943-52 average of 37,232,000 bushels. Yield per acre was indicated at 7.3 bushels, against 8.2 in 1953 and ten-year average of 9.3 bushels. Linseed oil market was lower in 1954 than the previous year. The high price for the year was 16 cents per pound, tankcars, Minneapolis, and slid down to 12 cents at the end of the year,

Trend of Oil, Fats & Waxes Prices
100=1949 Average

	1954											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	105.80	103.52	108.06	120.29	123.44	110.69	111.56	113.54	109.94	104.72	110.02	113.32
L.	101.39	100.29	102.85	108.68	107.43	108.12	106.07	109.94	98.76	102.20	105.99	110.98
	1953											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	107.75	105.31	103.42	99.73	94.81	93.70	91.89	93.01	92.68	92.68	97.31	102 97
L.	106.17	103.12	99.73	94.13	93.70	91.78	91.76	90.67	91.35	91.53	90.91	101.40

while the high in 1953 was 16 cents and the low 13.2 cents, same basis.

A new formula for determining the price at which government stocks of raw linseed oil would be sold by the Commodity Credit Corporation for domestic use was announced in May by the Department of Agriculture.

The price of the oil was to be computed as follows:—To the 1953 price support rate per bushel of flaxseed, Minneapolis, Minn., basis, add a crushing allowance of 45 cents per bushel. From that total subtract the current market value of 36.3 pounds of meal per bushel of seed. The balance was then divided by twenty-one pounds representing the oil content.

The following example was given on further explanation of the formula:—

Taking $4.05 per bushel at Minneapolis and adding 45c. per bushel crushing margin, gives a cost of $4.50 per bushel of No. 1 flaxseed. Assuming a meal market of $80 per ton, the 36.3 pound meal per bushel outturn would be equal to $1.45 per bushel, reducing the cost per bushel to $3.05. This balance would then be divided by the twenty-one pounds oil outturn which would equal 14.5 cents, which would be the minimum sales price per pound of raw linseed oil on this assumed meal market. The agency said the oil would be sold at this formula-derived price or at the market price, whichever is higher.

Peanut Oil Market Stronger

Smaller domestic peanut crop in 1954 strengthened the peanut oil market during the last quarter and advanced to 19½ cents per ton, tankcars, f.o.b. mills. The scarcity of oil and higher price increased consumer interest for imported oil and trading was quite active for shipment. Domestic peanut production in 1954 was forecast at 1,043,560,000 pounds by the Department of Agriculture, against 1,588,415,000 pounds in 1953 and ten-year 1943-52 average of 1,979,000,000 pounds.

However, the Foreign Agricultural Service reported that another large world peanut crop appeared in prospect in 1954 and preliminary estimates placed the output at about 12,000,000 short tons, virtually the same as in 1953. North American production was about one-fourth less than the previous year, due in part to the smaller crop in the United States. Production in Asia was expected to increase about 3 percent. India's crop was tentatively placed at 4,256,000 tons or slightly more than its large crop in 1953. China's crop was expected to be about 2,500,000, somewhat larger than 1953.

The South American peanut crop, harvested early in the year, showed a sizable increase from 1953. Production in the Argentine, which has increased each year since 1951, again reached a new high with a crop one-fifth larger than in the previous year. An increase of 15 percent was reported for Brazil.

Support for 1954 Crop Peanuts

Price supports for 1954 crop peanuts by types and areas were announced by the Department of Agriculture in August. Prices were based on a national average of $244.80 per ton, which is 90 percent of the August 1 parity price of 13.6c. per pound and $1.80 per ton higher than the minimum average support level announced April 7.

The base support price by types per ton follows:—Virginias, $236 per ton, containing 65 percent sound mature kernels; Runners, $220 per ton, some basis; Spanish, $241 per ton east of the Mississippi containing 70 percent sound kernels and $237 per ton, west of the Mississippi. Valencias suitable for cleaning and roasting were supported at the same price as Virginia type and other Valencia type at the same level as Spanish type.

Phenomenal expansion in the exportation of soybeans, cottonseed oil, flaxseed, linseed oil, and fish oils pushed the total United States export volume of fats, oils, and oilseeds—in terms of oil equivalent—to a new high level in the 1953-54 marketing year according to the Foreign Agricultural Service. Moreover, inedible tallow and grease exports broke a previous record established in 1952-53. The new record export level of all fats and oils came about as a result of substantial sales from stocks of cottonseed oil, linseed oil, flaxseed, and peanuts held by the Commodity Credit Corporation. These sales were made at competitive world prices.

Oilseed Exports During Year

Total exports in the marketing year ending last September 30 totaled 3,400,000,000 pounds oil equivalent, an increase of 50 percent from the previous record of 2,300,000,000 pounds in 1951-52. Cottonseed oil exports at nearly 400,000,000 pounds were the largest in at least forty years, while soybean exports, totaling nearly 40,000,000 bushels, broke the record of the previous year by one-fourth. Linseed oil exports shattered all previous records, while shipments of flaxseed were the largest in forty-seven years.

Exports in the 1953-54 marketing year in comparison with those of the 1952-53 season were as follows:—

	1952-53	1953-54
Coconut oil (lbs.)	16,083,000	10,951,000
Cottonseed (bu.)	24,747,000	29,085,000
Cottonseed oil (lbs.)	50,672,000	397,793,000
Flaxseed (bu.)	19,000	6,152,000
Linseed oil (lbs.)	4,040,000	430,272,000
Peanuts (lbs.)	2,337,000	168,578,000
Peanut oil (lbs.)	1,282,000	8,698,000
Soybeans (bu.)	31,907,000	39,496,000
Soybean oil (lbs.)	93,404,000	71,258,000
Lard (lbs.)	466,172,000	397,483,000
Tallow, edible (lbs.)	14,765,000	21,953,000
Tallow and greases, inedible (lbs.)	1,070,177,000	1,185,755,000
Fish oils (lbs.)	92,059,000	157,443,000
All other (oil content) (lbs.)	137,193,000	133,765,000
Total oil equivalent (lbs.)	2,271,000,000	3,432,000,000

President Eisenhower in November decided against imposing import restrictions on tung oil after being advised by the State department that Argentina and Uruguay planned to restrict shipments to the United States in the new crop year to 21,800,000 pounds and 2,600,000 pounds, respectivetly. In so acting, the President turned down recommendations of the Tariff Commission that imports of tung oil and tung nuts be limited to 13,400,000 pounds annually beginning November 1 in order to prevent imports from interferring with the price-support program.

CCC Supports for Tung Nuts

Growers price for 1954 crop tung nuts were supported by CCC at not less than $54.96 per ton, basis 18.5 percent oil content and tung oil at 21.2c. per pound, compared with $63.38 per ton for nuts and 23.9c. per pound, for oil in 1953.

The 1954 crop price support program will be implemented through purchase gareements on tung nuts and purchase agreements and loans on tung oil. Purchase agreements on tung nuts were available from November 1, 1954, through January 31, 1955, and the purchase agreement and loans on oil from November 1 through June 30, 1955. Premiums and discounts for tung nuts containing more or less than 18.5 percent oil content would be established. There were no area differentials for either tung nuts or tung oil. Loans on tung oil will mature October 31, 1955, or earlier on demand.

US Relaxes Hold on Business

—Continued from page 5

tered the rules on issuance of tax amortization certificates to authorize rapid depreciation of costs of moving an industry from a "target" area. . . . The agency also extended the benefits of rapid tax amortization to plants built before a certificate was issued and to plants completed after a goal was closed. . . . Albert C. Beeson of Food Machinery & Chemical Corporation, San Jose, Calif., was confirmed, after a fight with labor forces, as a member of the National Labor Relations Board. . . . In a major policy decision later, the NLRB decided against a single industry-wide union for chemical workers.

Moves by Alabama and Rhode Island to have the tidelands law declared unconstitutional were turned down by the supreme court. Later, the Interior department held its first lease sale of the oil and sulfur lands of the outer continental shelf off the coasts of Louisiana and Texas. . . . The senate and house passed a bill providing for a census of manufactures, trade and the mineral industries this year, but in an economy move, the house refused to vote money for the undertaking. . . . At the insistence of the senate, the house later yielded on the question and agreed to an $8,000,000 appropriation to cover costs of the canvass which now is getting underway.

Legislation on Dry-Bulk Cargo

Legislation to place transportation of dry-bulk cargo on the barge lines under federal rate regulation, which would nullify some of the freight advantages of chemical firms located along the inland waterways, was introduced and received the support of the Interstate Commerce Commission, but failed to progress further. . . . Operations of the government in the area of paint manufacture were hit by a special house investigating committee resulting in the navy being forced to cut back its manufacturing operations sharply. . . . A major revision of the atomic control law was voted to enable private industry to get into this field.

Steps to effect a merger of the Gas, Coke, and Chemical Workers and the Oil Workers International Union into a single CIO union were taken during the year and are expected to be completed in a few months. . . . Four new attacks on the state fair trade laws were rejected by the supreme court. . . . In another decision, the court held that the matter of fluoridation of public water supplies is a local question that involves no question of federal law.

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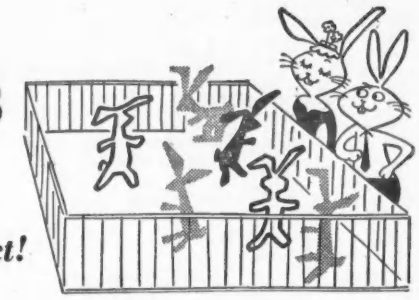

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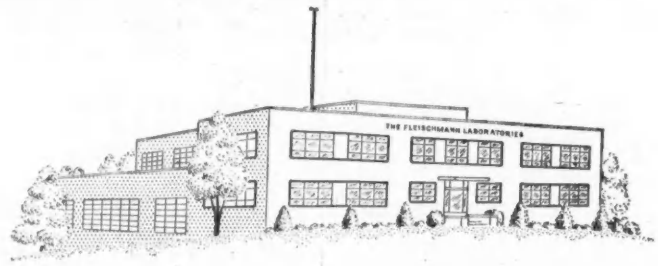

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